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Limited options open to the West in the Gulf

Süddeutsche Zeitung

Maybe the Americans were unwise virtually to side with Iraq in the Gulf War, especially after the Kuwaiti attempt to blackmail them before the half-hearted US decision.

The fast-moving Kuwaitis first requested a tanker escort from the Soviet Union. Prompt Soviet acquiescence eventually made the doubters and hesitators in Washington change their minds.

The US Navy is now in the front line of the fighting — and not the Arab Gulf states that rank highest on the hit list of Khomeini's henchmen.

The US naval presence is a tacit challenge to Teheran. The ball is now in the Iranian court; the next move is theirs.

~~Yet the~~ US move does not lack a longer-term logic, especially as the real problem has long assumed familiar historic dimensions.

The years 1789, 1917, 1933 and 1979 say it all, years that stand for the greatest domestic upheavals in modern history, the French and Russian revolutions, the Nazi take-over in Germany and the overthrow of the Shah in Iran.

In all four cases the domestic revolution was inseparably interlinked with the countries' imperial ambitions and with earlier conflicts with their neighbours.

By 1792 revolutionary France was at war with Austria, resuming the centuries-old clash between the Bourbons and the Habsburgs that seemed to have been ended at Utrecht in 1713.

In the immediate aftermath of the Russian revolution the Soviet Union was initially preoccupied mainly with itself.

But the defeat of Nazi Germany led to the Cold War, waged under a Red Flag but in keeping with the longstanding Russian aim of hegemony in Europe.

The 1933 Nazi take-over in Germany resumed in 1939 what historian Fritz Fischer called the bid for world power Wilhelminian Germany had to abandon in 1918.

The 1979 clerical revolution in Iran matched this pattern, albeit at a regional level. The dogfight with Iraq dates back to the Shah, as does Teheran's desire to gain the upper hand in the Gulf.

The Shah liked fine words just as much as the mullahs. Such as the claim that Iran would soon become the world's fifth-strongest military power.

America, he said, was a lame giant. The libertinous West, he forecast a year before he himself was ousted, would soon face the collapse of its democracy.

Iran, of course, is neither France nor Russia nor the German Reich.

Its rhetoric compares with its military resources like an American aircraft carrier does with the armed motor patrol boats that are intended to present a threatening posture in the Gulf.

Even so, neither the Americans nor the Europeans can afford to look disinterestly at a far-away war.

Just over 60 per cent of all proven oil reserves are in the Gulf region. A quarter are in Saudi Arabia, where the Ayatollah's soldiers tried to set up a second front in Mecca.

Besides, the war with Iraq has not stopped the Khomeini regime from expanding westward and setting up a kind of bridgehead in the Mediterranean in the form of the Hizbollah in Lebanon.

What ought the West to do? What can it do? Of the two, it is easier to say what it can't do. Robespierre's revolution was not brought to a halt until 1815, after 23 years of bloodshed. It took the worst war of all time to beat the Nazis.

Could Iran be invaded and occupied? No. Could the Americans do a deal with the "moderates," the deal they have been dreaming of for nearly eight years? The West might just as well have tried in 1944 to help Count Stauffenberg to come to power in Nazi Germany.

The "moderates" must make the grade themselves. Only then can the West do business with them.

The West can't keep itself to itself either, of course, even though some Europeans, led by Bonn, might think so.

Regardless of trade, no-one can have an interest in Iran winning. There are no natural limits to the expansionary drive of revolutionary regimes and self-professed world benefactors.

This historic fact underpins the logic of the US commitment and, at a fitting distance, the British and French commitment in the Gulf. A "US" role in the form of a naval escort need not necessarily be the main consideration. A joint minesweeping force would, for instance, protect innocent passage but not takes sides, not even indirectly.

Besides, a precedent was set in October 1984 when the USA, Britain, France and Italy joined up in a mines-

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(Cartoon: Behrendt/Frankfurter Allgemeine Zeitung)

Sober reappraisal of role of nuclear weapons needed

In his brilliant 1964 nightmare comedy Dr Strangelove, Or How I Learned to Love the Bomb, Stanley Kubrick outlined a scenario ending in the nuclear harakiri of mankind.

The politicians look on helplessly as a mad general and a pilot whose powers of imagination fail to extend beyond the shoot-out in Western movies take command.

The technical perfection of the security apparatus is transformed into a technically perfect suicide machine.

Kubrick's film amused and shocked the Americans a mere two years after the world had followed with bated breath the course of the Cuba crisis, in which the superpowers seemed to be bound for head-on confrontation.

Robert Kennedy recalled in his memoirs that one of the US chiefs of staff had advocated the use of nuclear weapons during the Cuba crisis in October 1962.

But President Kennedy refused to order even a conventional attack on the Soviet missile launching pads in Cuba even after a U 2 spy plane was shot down over the island.

"I have no qualms about the first step but I do have misgivings about escalation by both sides to the fourth and fifth steps. There won't be a sixth step because there will be no-one left to take it."

These are the words Robert Kennedy recalled his brother, the President, as having said.

The Cuba crisis became a turning point in world affairs. Only a few months later, in June 1963, the superpowers agreed to install a "hot line" scrambler phone between Moscow and Washington.

In July 1963 an initial test ban treaty was agreed. It marked the transition from cold war to detente, to use standard formulas.

Fresh crises have since shown that Kennedy's reasoning that no-one must take the first step because there is no way of knowing whether the fourth or fifth can then be prevented has emerged as the maxim of the nuclear age.

It has failed to give the world a guarantee of peace. Experts have worked out that there have been about 40 wars since 1945, more than 20 of them having been waged since the Cuba crisis.

Appalling photos from Asia, Latin America, Africa and the Middle East remind us daily that a "post-war period" can only be said to have prevailed in Europe.

A strict dividing line has been drawn through Europe where the immediate spheres of interest of the two superpowers directly clash.

Most of the world's nuclear warheads are stockpiled in Europe too. Substantial though any gains an aggressor might make in Europe could be, there is a no less substantial risk of the price that

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■ WORLD AFFAIRS

No innocents among the major trading nations

This article was written for Handelsblatt by Lutz Stavenhagen, Minister of State at the Chancellor's Office.

The United States has threatened to impose countervailing duties on European pasta exports.

The European Community would have to respond by taking retaliatory measures against American products.

The dispute is yet another test of whether the USA and the European Community can shrug off the pressure of particularistic interests and negotiate some kind of compromise.

European spaghetti exports valued at $25m and accounting for a 5 per cent share of the US market should not be the cause of such trade policy escalation.

In international trade there is a widening gap between the generally accepted and repeatedly emphasised principles of free trade, competition and the international division of labour and the threat, and sometimes implementation, of protectionist measures.

None of the world's major trading nations can claim to be innocent. Europeans feel that the USA is exerting pressure.

Buy-American procurement campaigns by the US government accompanied by deliberate measures against European products, ranging from pasta to machine tools, have got trading partners worried.

Criticism has also been levelled against the European Community's common agricultural policy, European practices in the telecommunications sector and the Airbus programme.

The trade policy initiatives of the US Congress are a particular cause for concern. The House of Representatives already passed the highly protectionist draft version of a new trade law in April this year.

This bill envisages substantially stocking up the arsenal of American retaliatory measures.

Among other things it plans to make it possible to compulsorily reduce bilateral trade surpluses if negotiations with trading partners fail to bring about the desired results.

The Senate recently adopted its own bill, which, contrary to previous expectations, also has highly protectionist features.

It gives the President the right to take countermeasures, for example, if barriers to trade cannot be removed via bilateral or multilateral negotiations. Both bills have yet to be aligned by a mediation committee.

We should do all within our power to ensure that the traditionally liberal character of American trade policy is upheld.

There can be no denying that economic policy decisions have become increasingly difficult.

Considerable exchange rate fluctuations, trade imbalances and unemployment have heightened the mood of uncertainty and prompted demands for more government.

Governments for their part show a growing inclination to adopt short-term protectionist solutions to existing problems rather than the longer-term and often more painful process of restructuring.

Almost all economic policy decision-makers agree that the speedy relief provided by protectionism cannot overcome the fundamental structural problems, but will only tend to exacerbate them by postponing their solution.

Uncertainty and weakness induce trading partners to concentrate on the "sins" of others and ignore the errors of their own ways.

Efforts should be made to avoid a situation in which bilateral trade talks are dominated by mutual reproach.

Overriding common goals and efforts to find a solution should not be pushed into the background.

A lack of willingness to learn from others and seek compromise produces an atmosphere of discord with adverse effects on the general economic as well as political climate.

The lack of clear multilateral rules and regulations in various fields of trade fosters a gradual decline of the standards of trade policy conduct.

Loopholes in the Gatt regulations enable broad interpretations of their content as well as means of circumvention.

These legal grey areas are bound to lead to conflict — not only in the trade policy field.

Consequently, governments are finding it increasingly difficult to ignore the demands of powerful lobbies.

The latter take advantage of legal loopholes to make compromises at the expense of others.

Adjustment problems are internationally passed on, as many a "voluntary" restraint agreement has shown. How can this be prevented?

We should pursue the objectives of the new round of Gatt talks which began just under a year ago and give markets a better chance.

We need improved regulations for traditional problem areas such as agriculture.

We need new regulations for new areas such as the services trade, for the protection of intellectual property and for the prevention of conditions for foreign investments likely to have a distortive effect on trade.

Furthermore, Gatt needs to be strengthened as an institution so that it can settle disputes more efficiently.

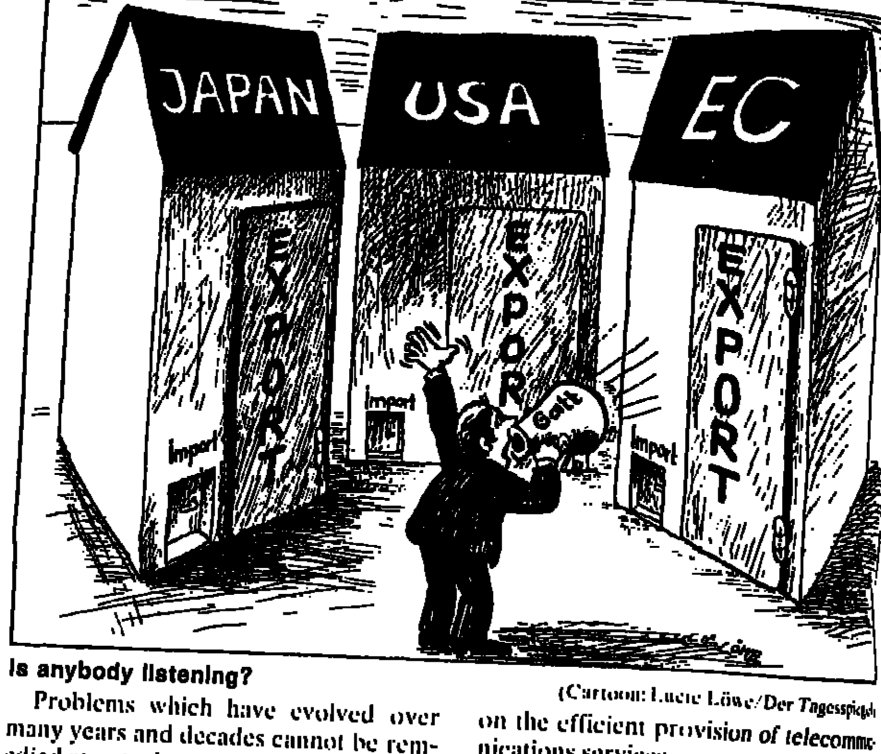
These objectives are ambitious and can only be achieved via the joint effort of all partners.

The agricultural sector is a particular cause of concern.

We all seriously underestimated the technological progress, the industriousness and the imaginativeness of the farmers and painted too rosy a picture of sales possibilities in this field.

Output has moved further and further away from the absorptive capacity of the market.

Farming experts agree that far-reaching adjustments are inevitable.



Is anybody listening? (Cartoon: Lucie Löwe/Der Tagesspiegel)

Problems which have evolved over many years and decades cannot be remedied at a stroke.

Furthermore, the scaling down of surplus production should not leave the farming sector in a state of desolation.

We must bear in mind the ecological aspects, especially in a highly developed and densely populated industrialised nation such as the Federal Republic of Germany.

There is, therefore, no patent remedy.

The surplus-producing countries, however, should all make a contribution towards reducing surplus production.

Each country should be able to take measures which best correspond to national circumstances (e.g. reduction of farmland areas, production quotas etc.).

The Airbus programme and the telecommunications sector are further fields of conflict between the USA and the European Community.

The respective bones of contention are the subsidies for the Airbus project and the problem of norms and access to the European telecommunications sector.

The Airbus programme has key industrial policy significance for Europe.

In addition, it increases international competition for commercial aircraft.

It should not be ignored that intensive European-American collaboration exists with regard to the engines and other parts.

These supplies promote technological progress as well as employment on both sides of the Atlantic.

In the field of telecommunications a common basis must be established for the considerably fragmented national markets in Europe.

The objective is adjustment via more competition and a reduction of national restrictions.

The interests of a modern and export-oriented industrialised country are best served by developing technologies of the future for the world market.

Attempts should be made to attract new investments and new know-how. There is no room for provincial go-it-alones.

In the Federal Republic of Germany we are aware of the fact that the international appeal and growth prospects of a given location depend to a large degree on the efficient provision of telecommunications services.

This is just one of the fields in which competition is the best guarantee for efficiency.

Trade disputes, especially between friends and in many ways interdependent partners such as the Americans and the Europeans, seem anachronistic.

Relatively insignificant reasons can lead to an uncontrolled escalation and adversely affect other fields.

As trade wars have no winners but only losers we should be able to find a way to settle the current problems between the USA and the European Community.

Both sides must realise that resorting to protectionism is an unnatural move.

The same social and economic values and goals serve as a model on both sides of the Atlantic.

This is particularly the case with regard to the role of the marketplace and competition.

Catchwords such as privatisation and deregulation, which can be heard in the USA, Britain, France and the Federal Republic of Germany, underline this fact.

The marketplace is given priority in each case, governments keeping in the background and setting greater store by initiative and achievement.

With confidence in our abilities we should be able to ease trade relations between the European Community and the USA.

Both sides, for example, managed to find a constructive solution to the trade conflict which flared up after Spain and Portugal joined the Community.

The Community recently dropped the idea of introducing a levy on fats, which would have hit American exports hard.

This sensible decision should serve as an example in the dispute over pasta exports and in all protectionist proposals which underestimate the efficiency and competitive strength of national economies.

Lutz Stavenhagen

(Handelsblatt, Düsseldorf, 4 August 1987)

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weeping run from Suez to Aden. The mines were not said to have been laid by anyone specific.

Moves of this kind can hardly be ruled out by the Bonn constitution, especially not the despatch of naval units to the Mediterranean as a token of solidarity with Bonn's allies.

The Iranians' missionary fervour has not closed their eyes to power relations. A joint approach or division of labour would surely hammer the message home, aid Western interests and encourage the Arab Gulf states to do more for their own security.

Where radical solutions are impossible a longer-term approach must be adopted.

Josef Joffe

(Süddeutsche Zeitung, Munich, 11 August 1987)

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■ GERMANY

Exchange of prisoners as a prelude to Honecker visit

Three weeks before Erich Honecker was due to visit the Federal Republic — and the day before the 26th anniversary of the Berlin Wall — the two German states staged a spectacular exchange of five prisoners.

Among them was Christa-Karin Schumann, a doctor for whose release Bonn has been working for years. In return Manfred Rotsch, convicted of industrial espionage in Munich last year, was handed over to the East.

West Germany handed over three prisoners and East Germany two. The exchange took place at the border post near Herleshausen, in Hesse, as part of the arrangement.

A spokesman for the Intra-German Affairs Ministry merely confirmed that



Eight years in East Berlin cells . . . Christa-Karin Schumann. (Photo: dpa)

Frau Schumann had been allowed to leave East Germany and had arrived in the Federal Republic.

ADN, the East German news agency, reported the news in a single sentence: "On the basis of agreements between the relevant authorities of East Germany and the FRG an exchange of people imprisoned in the two states took place on 12 August 1987 at the Wartha GDR border crossing-point."

Frau Schumann, 52, was sentenced in East Germany on 26 June 1980 to 15 years for espionage.

She is said to have been the companion of Rear-Admiral Winfried Baumann, who tried in vain to escape to the West after having been exposed as a spy and was executed.

Rotsch, 63, was sentenced to eight and a half years in July 1986 for spying for the KGB.

As research director at Messerschmitt-Bölkow-Blohm (MBB), the aerospace group, he supplied the Russians with classified information about the Tornado multi-role combat aircraft and various satellite projects.

He had worked for the KGB for 30 years and was arrested only a few days before he was due to retire. He came to the Federal Republic from East Germany in 1954.

East Germany is reported also to have released Manfred Wilms, who was given a life sentence in 1983 for spying for the Federal Republic.

The Federal Republic released Wolfgang Klautzsch and Klaus Schmidt, who were serving two and three years respectively, also having been convicted of espionage.

Bonn government officials say the exchange was negotiated over a period of months by Ludwig Rehlinger, state secretary at the Intra-German Affairs Ministry in Bonn, and East Berlin lawyer Wolfgang Vogel.

Frau Schumann's brother, Professor



Storm over Tornado secrets . . . Manfred Rotsch. (Photo: dpa)

Wolf-Dieter Thomitzek of Heidelberg, and his wife Ruth have demonstrated on several occasions at Checkpoint Charly in Berlin for her release.

They accused the East Berlin authorities of holding Frau Schumann, who was convicted of espionage and aiding Baumann's bid to escape to the West, in solitary confinement in a special jail.

Western diplomats say East Germany has done well in exchanging Schumann for Rotsch. He had only been in jail a year and she since 1979.

The parties in the Bonn Bundestag have called on the occasion of the Berlin Wall's 26th anniversary for the East German border emplacements to be demolished and the ending of the shoot-to-kill policy.

The *Junge Union*, the youth organisation of the CDU/CSU, has strongly criticised the intention of SPD-ruled *Länder* to stop paying their share of the cost of running the Salzgitter record office that monitors crimes by East German authorities.

A *Junge Union* leader said identification of offenders at the border had led to many a shot being fired wide.

(Lübecker Nachrichten, 13 August 1987)

The Berlin Wall

Nothing at all can be done to beautify the Berlin Wall or what it stands for. Twenty-six years after it was built it remains an appalling monument to the division of Germany.

It is also a reality. It would be as meaningless to pretend to ignore East Germany because of the Wall as it was to try and impose a cordon sanitaire round it by means of the Hallstein Doctrine.

There is little point in arguing how East Germany might have developed if the Wall had not been built.

It is equally speculative to ponder over the degree of stability and flexibility in other ways East Germany has gained by building the Wall.

The fact is that East Germany today can no longer, in many respects, be compared with East Germany as it was in 1961.

Relations between the two German states have been normalised in this lengthy period — to the extent that there can be said to have been a return to normal in view of the Wall.

The two states are no longer as chary of contacts between them as they once were. The visit East Berlin leader Erich Honecker is to pay the Federal Republic early next month will be a highlight in attempts by both sides to make more bearable the difficult situation that resulted from a war Germany criminally waged and lost.

When Herr Honecker arrives he will not bring with him the news that the Wall is to be demolished, but there are signs that it may one day have outlived itself in its present form.

Younger East Germans and not just pensioners, are now allowed to visit the Federal Republic, and nearly all of them return home.

More humane forms of demarcation must be possible if this trend continues. Now East Germany has abolished the death penalty it ought to be able to forgo the order to shoot at would-be refugees to the West too.

That is a point to be raised with Herr Honecker while he is here.

East Germany has interests of its own in maintaining cordial relations with Bonn, while Bonn is prepared to make concessions that seemed inconceivable only a few years ago.

This is borne out by the fact that Herr Honecker will be welcomed to Bonn with little short of the full honours accorded to a visiting head of state. On this basis still more ought to be possible that benefits ordinary people.

Ralf Lehmann

(Westdeutsche Allgemeine, Essen, 13 August 1987)

Border guards' shoot-to-kill order modified

There is evidence that the shoot-to-kill policy of East German border guards has been modified in an attempt to avoid unfavourable foreign responses.

More refugees than ever are crossing the border to the Federal Republic. It seems that some guards are shooting wide, some are not shooting to kill and that, at times the order to shoot is simply waived.

Such times included the visits to Berlin by President Reagan, President Mitterrand and Queen Elizabeth.

A close season seems to have been declared in the run-up to the visit to West Germany early next month by East Berlin leader Erich Honecker.

East Berlin seems extremely sensitive about foreign response. That is an interesting discovery to make on the eve of Honecker's visit.

Bonn Foreign Minister Hans-Dietrich Genscher has warned against using Herr Honecker's visit as a means of gaining domestic stature.

There is a certain irony in this warning. Herr Genscher himself is hard to beat at getting the most domestic political mileage out of events of this kind.

He does his best to let his own party benefit from the spin-off from his Foreign Office work, such as the dispute over whether 14 Chileans facing death sentences should be granted political asylum in Germany.

Free Democrat Genscher is a dab hand at converting into extra FDP votes the constant irritation of Bavarian Premier and CSU leader Franz Josef Strauss, who would dearly like to see a change of direction in foreign policy and still feels he himself would make the better Foreign Minister.

Genscher is unhappy that Strauss is at present clashing mainly with the CDU and not with him, which is cutting down his vote-winning leeway.

Nearly all West German politicians would agree with Herr Genscher in hoping Herr Honecker's visit goes ahead without incident — if at all possible.

On this point, arguably the exception that proves the rule, Herr Strauss and Herr Genscher see eye to eye.

Herr Genscher says it would be better not to overburden East Berlin's leader with too many demands. His visit must not be overused to gain political stature either.

In contrast to dealings with General Pinochet, the Chilean dictator, the rule is to pave the way for human easements by a patient dialogue rather than by threatening gestures.

Herr Honecker is a guest and his safety must be ensured. He will probably be spared the demonstrations by hate-crazed left-wing extremists President Reagan has to face when he visits the Federal Republic.

But there is unlikely to be a repeat in the Federal Republio of the eerie scene in Güstrow, where Bonn Chancellor Helmut Schmidt walked round empty streets on his visit to East Germany.

President Reagan calls without the slightest inhibition for the Berlin Wall to be demolished. Bonn officials prefer to sound a quieter note. After waiting so long for Herr Honecker's visit the fact that it is finally to take place has a value of its own.

Shortly before tensely-awaited state assembly elections in Schleswig-Holstein the Christian and Free Democrats are also keen to benefit from the side-effect of untiringly championing the cause of detente and peace.

They are keen to give the lie to the Opposition parties in Bonn, who argue that the opposite is the case.

Three years ago, on a past occasion when the East German leader was due to visit the Federal Republic, Chancellor Kohl somewhat embarrassedly suggested that tree deaths might be a major item on their agenda. They now seem likely to have more to discuss.

Herr Genscher's advice on how to handle the Honecker visit includes the warning not to exaggerate in either direction. It would be no less wrong to accuse Honecker of having blood on his hands than to kiss him demonstratively on the cheek.

Maybe headway can be made, in a circuitous way, on the order to shoot at refugees from East Germany by making it clear how relieved Bonn is to see a drop in the number of border incidents of this kind.

The intervals during which shooting dies down in connection with certain events show that East Berlin is well aware how ill-suited bloodshed is in the detente context.

This is surely a juncture at which to object to an order that makes no sense when the East German border is hermetically sealed off to the West in any case.

Hermann Eich

(General-Anzeiger, Bonn, 12 August 1987)

■ DISARMAMENT

Germany's Pershing 1A: the neglected debate



Making peace with fewer and fewer weapons is one of the formulas with which Bonn Chancellor Helmut Kohl likes to lace his speeches on disarmament.

As experience (including experience under SPD-led governments) has shown, that is easier said than done.

Even so, it has so far been virtually inconceivable that Bonn might block an initial, bona fide disarmament agreement.

The present dispute over the Bundeswehr's Pershing 1A missiles is a stern reminder that the opportunity of holding a serious public debate on these nuclear weapons has been neglected for decades.

Any such debate would have had to deal with the so-called two-key concept by which the United States holds the key to the missiles' nuclear warheads while the Bundeswehr controls the carrier vehicles (missiles, aircraft, artillery shells).

This concept runs counter to the German renunciation of both the manufacture and the right of disposal over nuclear weapons.

It is also hard to reconcile with the nuclear non-proliferation treaty, which rules out German access to nuclear weapons.

This is the background against which repeated assurances by German politicians that the Federal Republic is not a nuclear "have" must be seen.

The "haves" are the superpowers America and Russia and the so-called third states Britain, France and China, which all have independent nuclear deterrents.

The controversial 72 Pershing 1As are thus not third-state systems. It is equally untrue to say they belong to Nato and cannot, for that reason, be included on the agenda of the superpowers' Geneva arms limitation talks.

Nato does not have sovereign rights of its own and thus cannot figure as a third state with nuclear warheads of its own.

What is clear is that the Pershings' nuclear warheads belong to the United States, and that, as the Soviets see it, is what matters.

The issue is further befogged for interested members of the general public by the fact that the military value of the Pershing 1A is strictly limited.

The missile is not accurately enough targetable for the role for which it is said to be envisaged.

In other words, it cannot be relied on to knock out military targets; it can only be used as a weapon against soft targets, as military terminology — perverse at times — calls indiscriminate victims of nuclear weapons.

Besides, the manufacturer will soon no longer be able to supply spare parts, so the missile will cease to be operational by the early 1990s.

The reasons why the Bonn government is so insistent on retaining the missile are thus strictly political. Sad to say, they too are hard to explain, being largely based on irrational assumptions.

They include for one the requirement of a progressive scale of nuclear escalation, as presupposed by the flexible response strategy, for which a continuous escalation is indispensable.

It must extend from theatre nuclear weapons via intermediate-range systems to strategic intercontinental ballistic missiles.

The insistence on this graduation mainly reflects the fear felt by America's allies, who fancy that the United States would only be prepared to use its strategic weapons to defend Nato in Europe if Washington were associated with every stage of nuclear escalation.

If this were not the case, the argument runs, there would be a risk of America decoupling.

A further factor is the omnipresent sense of inferiority felt by nuclear have-nots.

This sense of inferiority, as was shown by the dispute in the late 1950s over whether the Bundeswehr should be equipped with nuclear weapons, is particularly pronounced in the Federal Republic.

A variety of somewhat scurrilous ideas has since been mooted, up to and including recent proposals for a Franco-German neutron bomb unit.

All that has actually materialised is the two-key arrangement, based on a strictly observed treaty between Washington and Bonn.

A majority of Bonn government politicians are clearly not prepared to forgo this minimum. Their assumption seems to be that they might then still be able to attend sessions of nuclear planning groups but would no longer be entitled to a say in their proceedings.

The military insignificance of the Pershing 1A must not be allowed to give rise to any misunderstanding as to the role of the superpowers at the Geneva conference table.

Nor, for that matter, must the political interests that motivate Bonn in its desire to retain the missile for the time being be allowed to do so.

Should both sides be seriously resolved to come to terms on a zero-plus solution in respect of medium-range

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Geneva talks approach final hurdles

The disarmament talks that hit the headlines most often are the Geneva arms limitation talks held by superpowers America and Russia since March 1985.

The aim of the talks was laid down by Secretary of State Shultz and Foreign Minister Gromyko at a preliminary meeting in January 1985.

The two parties, they agreed, were to try and "draft effective agreements aimed at preventing an arms race in outer space, at ending the arms race on earth and at limiting and reducing the number of nuclear weapons and enhancing strategic stability."

The negotiations cover three sets of issues. They are:

- the limitation and reduction of medium-range missiles (INF, or intermediate nuclear forces);
- the limitation and reduction of strategic arms (Start, or Strategic Arms Limitation Talks);
- the prevention of an arms race in outer space. This complex includes SDI, President Reagan's Strategic Defence Initiative, and the Asat talks on anti-satellite weapons.

The position at present is that both the Americans and the Russians have tabled treaty drafts on all three complexes but that their positions have only grown any closer on medium-range missiles.

The Soviet leader, Mr Gorbachov, eliminated a major obstacle last month in saying he was prepared to dispense with Soviet SS-20 missiles stationed in Asia.

That brought within the realms of possibility a worldwide zero solution for missiles with a range of between 500 and 5,000km. It would be the first genuine nuclear disarmament treaty.

The Americans called for a worldwide ban on this category of weapon on pragmatic grounds, arguing that a total ban was easier to verify.

The US delegation in Geneva honoured the Soviet move by taking a closer look at Moscow's demands. The United States said it was prepared to forgo the option of handing INF carrier systems over to third states and to dispense with the conversion of existing systems.

In other words, Pershing 2s would not be converted into shorter-range guided missiles as a replacement for the Bundeswehr's ageing Pershing 1As.

Similarly, there would no longer be any question of transferring cruise missiles from land-based launching pads to ships.

The toughest problem at present is what to do with the Bundeswehr's six dozen Pershing 1As. The Russians insist on the warheads, which are kept under US lock and key, must be scrapped.

The Americans refuse to include the Pershing 1As on the agenda, arguing that they are third-state weapon systems and thus beyond the scope of the superpowers' talks.

A possible solution would be for the Americans to call a halt to supplies of spare parts, which would mean the missiles would be museum pieces and have to be phased out by the early 1990s.

Their warheads would also quietly be withdrawn in the final phase of INF reduction, which is expected to take between three and five years.

Differences have lately arisen on relatively minor issues such as the rate at which missiles are to be phased out.

The Americans suggested the Russians, who have more missiles and warheads, might make the first move. After a while the United States would follow suit.

The Soviet delegation dismissed this idea. Moscow insists that both sides must start their missile phase-out simultaneously. It seems that there is no full agreement also on what bases are to be opened to inspection by the other side.

US officials no longer expect the talks to fail, no matter what disagreements are still outstanding. Observers expect agreement to be reached this autumn on the latest disputed issues.

There would then be no further obstacle to President Reagan and General Secretary Gorbachov signing the INF Treaty before the year's end.

Wolfgang Schmieg

(Nürnberger Nachrichten, 5 August 1987)

Nuclear weapons

Continued from page 1

would have to be paid proving unacceptably high.

There can hardly be any doubt that nuclear weapons have been and continue to be the reason why the state of non-peace between East and West has not been transformed into war.

Politics has changed in other parts of the world too since the invention of the Bomb. In contrast to the past, conflicts in which a superpower has been involved have remains local in scope.

That is scant consolation for the victims on the spot, both military and civilian, but it does show that "vertical escalation," the nucleus of the atomic threat, will to some extent stop short of "horizontal escalation," i.e. extending the hostilities geographically.

In Vietnam the world has seen what appalling consequences a "merely" conventional war can have.

It was also clear in Indo-China that even on the brink of defeat the Americans had no real nuclear option. They couldn't hope to use nuclear weapons to win the war.

That may not be a valid reason for "loving the Bomb," but it is reason enough, given the potential for destruction stockpiled in East and West, not to succumb to panic but to embark on a sober reappraisal of the function of nuclear weapons.

They are psychological weapons aimed first and foremost at the head says André Glucksmann.

They are, at the same time, political weapons in that they force the superpowers to talk with each other in times of crisis in areas of unrest.

Henry Kissinger has written that Washington was in daily contact with Moscow during the Yom Kippur War in 1973. The Americans evidently notified the Soviet leaders before launching their 15 April 1986 raid on Libya too.

Above all, nuclear weapons force the superpowers to engage in a constant dialogue. Every ice age in relations between Washington and Moscow has so far led to a thaw and to fresh disarmament or arms control negotiations.

Deterrence, Glucksmann also says, is the way people who are unable to understand each other understand each other.

This, then, is the war-preventing rational side of the Bomb. The daemonic side of nuclear weapons is that they can no longer be banned from the world, not even by agreements between the superpowers.

That is why Kubrick's horror vision will constantly recur, ranging from sceptical hope, as in War Games, to hopeless pessimism, as in The Day After.

It is an attempt by the sorcerer's apprentice to come to terms with the fact that there is no magic spell by which he can regain control over his equipment.

The art of magic is to conjure the dreadful so that it doesn't become reality.

Günther Nonnenmacher

(Frankfurter Allgemeine Zeitung für Deutschland, 17 August 1987)

■ PERSPECTIVE

Americans wrestle with the problem of trying to understand Germany

Frankfurter Allgemeine

The *New York Times* correspondent who, after working for five years in Bonn, claimed that there is a widespread feeling of *angst* in the Federal Republic of Germany despite economic prosperity, should know better.

He referred to a fear of dying forests, of nuclear war, of the weather and of "life" in general.

American newspapers are not alone in their superficial assessment of the "unpredictable Germans". Other "opinion leaders" such as politicians and professors are also finding it difficult to objectively define their relationship to Germany and the role of the Federal Republic as an alliance partner to the USA.

Even State Department experts puzzle over the windings and turnings in the field of Deutschlandpolitik.

During a conference in Los Angeles the Bonn-based Konrad Adenauer Foundation tried to answer some of the critical questions posed by Americans.

On the west coast of the United States the population is more interested in what goes on in Latin America and in the Pacific region rather than in Europe.

Californians know little about their distant German partner in the heart of Europe. Events in Mexico or Korea arouse greater interest.

The appreciation of the worries and interests of the Germans is less pronounced than on the east coast, where the social elite is more aware of its proximity to European traditions.

Americans feel that the main difference between the partnerships of the USA with Western Europe and with Asian countries is Nato.

However, they claim, anyone who talks of a "democratic community of values" must also be willing to contribute a fair share towards that community.

With the help of American taxpayers' money the USA is currently safeguarding Europe's and Japan's energy supply in the Persian Gulf as well as its own.

Demands that Washington pull out of Nato are still dismissed by government officials as a fringe opinion.

Calls for a "fairer distribution of responsibilities" within the alliance are no longer only heard in Congress.

Visitors from the Federal Republic of Germany are also reminded by the State Department and the Pentagon of the European responsibility to also help America protect regions not covered by the Nato alliance.

In an article for the magazine *Foreign Policy* Christopher Layne writes: "As Western Europeans erroneously believed that their security is as important to Americans as their own they have conveniently taken a rest for almost four decades in the hope that the United States would defend them regardless of their own efforts."

In the age of strategic nuclear missiles, he continues, it is an illusion to believe that American towns and cities would be put in jeopardy in a war to defend Western Europe.

(Former US Defence Secretary McNamara, for example, already warned President Kennedy and President Johnson during the sixties against being the first to use nuclear weapons in the event of a conventional attack by the Soviet Union).

Conference delegates in Los Angeles agreed that détente in Europe cannot be considered in isolation from an answer to the German Question.

Does the unclarified nature of their relationship to East Germans make West Germans forget how good over 40 years of freedom has done them?

Would they prefer to move into Gorbachov's "common house" rather than strengthen ties with the West?

Should Americans support rapprochement between the two Germanies?

Representatives of the US Administration referred to President Reagan's "offensive" speech in Berlin, in which he called upon the Soviet leader to "tear down the wall" — a demand which Reagan reiterated in Washington after his visit.

The policy of the alliance towards Germany should be linked with demands to the East for the realisation of human rights as well as for strategic restraint.

Economically and politically, on this there is no doubt in America, the Federal Republic of Germany is firmly embedded in the western community.

Nevertheless, there are fears that the Germans might succumb to the allure of a "culturally" defined "Central Europe".

The response of other nations to the German desire for reunification has become more and more irreconcilable, CDU Bundestag member Peter Kittelmann complained, as the memory of the Second World War fades.

Harry Gilmore, the new American envoy in Berlin, described the evolution of German democracy since 1945 as a "major success" before warily asking what would happen "if Gorbachov were to offer a deal resulting in a neutral Germany?"

Americans don't like the idea that the key to German reunification lies in Moscow.

They are worried about what they would have to sacrifice to enable closer German-German ties.

They made it clear that they would not sacrifice their security and their views on freedom.

American conferees expressed their concern that the growing interest of West German youth in the GDR could be accompanied by a growing dissociation from the values of the alliance.

Conservative Americans such as Christopher Layne do not want to leave demands for a "Europeanisation of Europe" up to the peace movement.

In the struggle of the world powers for the heart of Europe, they emphasise, America should present itself as the "champion of German interests".

The creation of European armed forces independent of the United States, which Layne and others would like to see, depends on the ability of West Europeans to jointly formulate their political objectives.

As long as, on the one hand, patriotism which firmly supports the values of democracy is not established among Germans and, on the other hand, the idea of German reunification makes neighbouring countries, e.g. France, feel uneasy, however, Nato will tend to be "an instrument for the containment of the Germans rather than the Russians" (Layne).

He described the "ritual assurance" of mutual respect between alliance partners as an "empty shell".

Peter Kittelmann urged Nato critics not to destroy increased trust by "describing what is theoretically conceivable as if it were a real possibility".

German conference delegates reminded Americans of the development and expansion of the European Community into an economic and political entity.

This is more realistic, they claimed, yet also more boring than developing conspiratorial theories about "Central Europe".

The European Community guarantees the prosperity of its members and thus cushions social conflict, they stressed.

In addition, the Community has decisively contributed towards successfully estabishing democracy in Greece, Spain and Portugal.

The Americans took the hint, pointing out that although the European Community is an economic rival of the USA Washingon has, for political reasons, backed post-war European efforts to set up a united Europe.

However, the Americans complained, Europeans hide behind a vague "common Community opinion" whenever awkward decisions have to be made, e.g. on whether to support the US air raid on Libya in April last year.

The United States, it was added, would not thoughtlessly pull out of Europe.

Germans, however, should not ignore warnings, since the general political environment can change suddenly.

The lengthy declarations of the Single European Act and the difficult process of integration in the European Community are not popular topics, even though the delegates in Los Angeles were willing to discuss them.

Will the coming generation continue the transatlantic dialogue?

Despite mutual criticism and numerous contentious issues, Peter Kittelmann confirmed, Americans and Germans are only capable of action if they act together.

They must learn, he said, to "treat each other with respect". Fear is an unwelcome bed-fellow.

Michael Groth

(Frankfurter Allgemeine Zeitung für Deutschland, 13 August 1987)

Continued from page 4

missiles, German objections are likely to go as unheeded by the United States as the Soviet Union may (or may not) be prepared to disregard the ongoing deployment of the Pershing 1As.

If the superpowers are not prepared to come to terms, they may find Bonn's attitude a convenient excuse for washing their hands in innocence at having failed to reach almost tangible agreement.

Whatever happens, the Bonn government will be unable to avert suspicion that its call for peace to be made with fewer and fewer weapons is mere rhetorical window-dressing.

Karl-Heinz Harenberg

(Deutsches Allgemeines Sonntagsblatt, Hamburg, 16 August 1987)

■ TRADE

Gulf crisis poses no immediate threat to the world's oil supplies

STUTTGARTER ZEITUNG

The industrialised states need not fear a third oil crisis, at least short term. The Strait of Hormuz in the Gulf are only of limited importance for oil transhipment.

Only between five and seven per cent of German oil and 20 per cent of world oil are brought through the Strait.

In the first half of this year 11 per cent of West Germany's oil came from the Gulf states.

Over the last few years, North Sea oil has grown to 41 per cent of German requirements. This means any shortfall from the Gulf could be easily covered.

In the long-term the situation is not so rosy. Two-thirds of the world's oil reserves of 95 billion tons are in Opec territories.

West Germany cannot permanently avoid importing oil from the area.

Besides worldwide demand for oil is increasing, particularly in the developing countries. At present 45 billion barrels are needed daily.

British Petroleum boss Hellmuth Buddenberg believes that over the next few years demand will increase 10 per cent.

Internationally oil markets are tense and the American oil price is reacting nervously because of the Gulf crisis. But on European trading centres there is little sign of panic.

In New York the price is hovering around 23 dollars a barrel. In Rotterdam it is fetching only 20 dollars.

The difference, according to the experts, is based on the American overreaction to the Iranian threat.

There is plenty of oil in storage so the talk should be of glut rather than shortage. The Opec states seem to have given up all attempts at production discipline. The International Energy Agency in Paris says 18.2 million barrels were produced per day during July, 1.6 million more than agreed.

The Iranians and Iraqis have exceeded their quotas by more than 60 per cent. Saudi Arabia, the United Arab Emirates and Kuwait also seem to have disregarded their quotas.

There is little chance of change in the foreseeable future because the Gulf states need money.

The Iraq-Iran war has cost more than just the combatant nations over the past seven years. Experts calculate the war has already cost Iraq DM360bn.

But the other Arab states have been financially involved in the war as well. They have poured out directly DM30bn in aid to Iraq.

The states of the Middle East are also suffering dramatically from their depressed incomes from oil. A one-dollar drop in the oil price signifies for the Opec countries a decline in oil income of at least eight billion dollars.

Between 1980 and 1985 their oil income dropped from 150 billion dollars to 132 billion dollars.

It is estimated that oil income for 1986 was 81 billion dollars, about as much as they earned before the oil crisis.

In addition the decline in the value of the dollar has made considerable inroads into the purchasing power of the oil-exporting countries.

The Gulf states' investment possibilities have melted away. These onetime free-spending states are now having to adjust their expenditures to income. This means that imports and contracts have had to be cut. West German companies have felt this.

A spokesman for building contractors Ed. Züblin of Stuttgart said: "Business with Iraq was very important for us a few years ago." But those days are past. Züblin has been given no new contracts and work on a dam near Mosul in Iraq is almost completed.

The Strabag building contractors of Cologne have captured no new contracts after having completed a civil air port in Basrah and a motorway in the west of Iraq.

The latest statement by Foreign Minister Hans-Dietrich Genscher that Baghdad started the war, did not do economic relations any good.

Iraq has cancelled dicussions that were to be held with Mannesmann AG for a contact that ran into billions.

According to the Federal Statistics Office in Wiesbaden both sides in the war have held back from investing.

West German exports to Iraq dropped 36 per cent last year to DM1.4bn. West Germany only imported goods valued at DM227 million from Iraq, 38 per cent less than in 1985. Ninety per cent of imports involved oil.

In the first half of this year the picture has changed. Exports to Iraq dropped further to DM300m, imports were DM282m, considerably more than in the whole of 1986.

The same sad picture holds true for Iran as well. Imports from Iran dropped last year by 38 per cent to DM1.1bn. Exports declined by 32 per cent to DM3.9bn.

In the first half of this year imports again dropped dramatically to DM387m and exports to DM104m.

More than 60 per cent of imports are accounted for by oil, carpets 30 per cent.

Last year Germans bought precious Persian carpets to the value of DM388m, DM170m more than in 1985. This was brought about mainly by the sales slogan: "Buy Persian carpets while you can," a spokesman for the Iranian textiles industry said with a smile.

Industry has so far taken a relaxed view of developments in the Gulf. The political situation and the way oil prices have gone have been responsible for the continuing cuts in what used to be a flourishing trade at the beginning of the 1980s.

The outlook could change as soon as the warring parties lay down their arms.

Then Iraq and Iran would need to build up a modern industrial base. West Germany's position in the Gulf is not so bad. West Germany remains one of the major trading partners for both countries still.

Inge Nowel

(Stuttgarter Zeitung, 8 August 1987)

Exchange rates play games with super-league export figures

West Germany exported 234 billion dollars worth of goods last year, says the International Monetary Fund. This puts it ahead of the United States (217 billion dollars) and Japan (211 billion dollars).

The popular daily *Bild Zeitung* proclaimed jubilantly, "We are world champions." The paper was right: international comparisons are made like that.

Foreign trade figures for 1986 put exports at DM526bn and imports at DM414bn. When comparisons are made it all depends on what dollar-mark exchange rate is used.

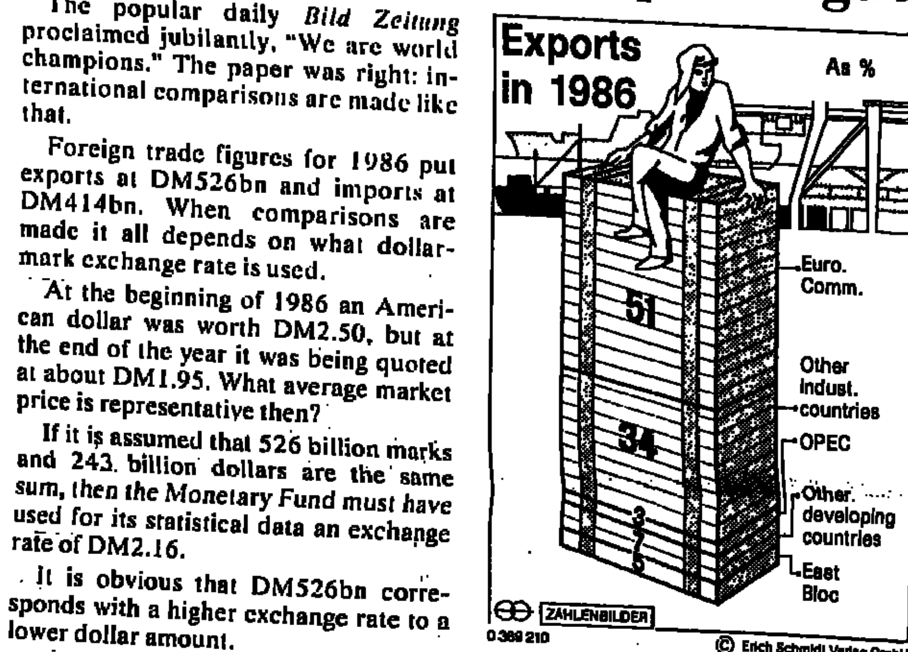
At the beginning of 1986 an American dollar was worth DM2.50, but at the end of the year it was being quoted at about DM1.95. What average market price is representative then?

If it is assumed that 526 billion marks and 243 billion dollars are the same sum, then the Monetary Fund must have used for its statistical data an exchange rate of DM2.16.

It is obvious that DM526bn corresponds with a higher exchange rate to a lower dollar amount.

But in the final analysis it is not important whether German exporters hold first or second place in the world list. The only fact that matters is that for many years West Germany has been among the top exporters, which shows that its exports are competitive despite high production costs.

Inflation is almost zero and the unit labour cost has almost remained unchanged. These two points have also worked in favour of German exports. Despite prophecies of doom high quality must have been the reason for the country's success on international markets.



In addition, the exports are broadly based: motor vehicles, electronics equipment, iron and steel, chemicals, synthetic materials and textiles.

This wide range means staying power and reduces sensitivity to the ups and downs of international trade.

There is considerable dependence on free world trade when every third mark is export-dependent. However, the high German export surplus of DM112bn last year is a constant source of anti-free world trade endeavours, particularly in the USA.

This indicates that the old mercantilist ideas, that every effort should be made to achieve the highest possible export surplus, no longer holds good.

Some industries are very exports-oriented. More than 50 per cent of workers in the engineering and automobile industries are involved in export contracts.

Each of these has an export turnover of almost DM100bn, putting both industries at the top of the list of exporters, in front of the electronics and chemicals industries.

In the iron and steel industries it is said that 80 out of every 100 workers are directly or indirectly involved in exports.

West Germany's strong position on world markets seems endangered since last year. It is indeed a serious question how can our industry come to terms with a strong deutschemark against a weak US dollar.

No-one will deny that exporters have in the main made an extraordinary large amount of money when the mark was cheap and the dollar at DM3.50 was almost twice as dear as it has been in the past few months.

But now every dollar earned abroad is only worth half as many deutschemarks.

The result of this is that either prices must be increased, neglecting competitivity, or exporters' profits must be reduced.

To this can be added that there has been a worldwide slowing down of the economy, which is a checking factor on exports, and the oil states are no longer the big spenders they used to be.

But despite all this exports have held their own extraordinarily well. The *value* of West German exports weakened slightly in the first half of 1987 to DM256bn, down three per cent, but the export *volume* remained the same. This could only have happened because prices had dropped.

Import prices have dropped sharply on average by ten per cent so that the export surplus in the first six months of this year reached a record high of DM55bn. It does look as if exports have not yet completely adjusted to reduced order books.

Certainly West German exporters have looked on the slight increase in the dollar exchange rate with relief, but in general it is difficult to say where the breakeven point lies.

For example a little while ago it was being said at Porsche that when the dollar was at DM2.20 Porsche could still do solid business, and they could come to terms with DM1.80 but they would not be making the profit they would like to be making.

The central banks promptly reacted to the dearer dollar by buying up dollars so as to brake the exchange rate increase and so remove barriers to American export efforts.

This shows just how much monetary policy and foreign trade influence each other.

Volker Wörl

(Süddeutsche Zeitung, Munich, 8 August 1987)

■ BUSINESS

Millionaire computer whizz-kid soars over Silicon Valley

DIE WELT

At 31, Andreas von Bechtolsheim is worth about 60 million dollars by his own reckoning: he is one of that small band of self-made men from Silicon Valley, in California.

Bechtolsheim comes from the town of Nonnenhorn, on Lake Constance.

This day, I had lunch with him at Roger's Deli: meat salad on rye bread and a small bottle of red currant juice. Cost: 3 dollars 49.

This is the man, dressed in jeans and a coloured lumberjack's shirt, called Wunderkind by his American friends. His rise from student to successful young businessman has been breathtaking.

His story began five years ago when he was studying computer science at Stanford University. At 24 he wrote his thesis.

He and Vinod Khosla, son of an Indian emigrant, had the idea of forming a company. They brought in the man whom experts regard as the software guru, William Joy, of Berkeley University on the other side of San Francisco Bay.

Scott McNealy of Harvard, who had already worked with another computer firm, also joined them.

They quickly raised their start-up capital of 4.5 million dollars.

Bechtolsheim said: "I did most of the development at Stanford alone. When we founded the firm it was impossible to press on alone."

Bechtolsheim quickly found a name for the firm, Sun Microsystems, derived from an abbreviation of a Stanford University Network (SUN) experimental project.

In the first year the four men had sales of almost 9 million dollars. In the second sales were 39 milion and in the third they sold 119 million worth of their products. All of them had become millionaires over-night.

The hectic pace of the computer industry was too much for Vinod Khosla, who decided at the age of 30 to pull out and retired with 17 million dollars.

Andy, as Bechtolsheim's friends call him, said: "It is true I'm worth about 60 million." Before he answered he paused to consider if his personal wealth was really so high. To get an accurate view he had to add up his share portfolio.

About 50 of his comrades-in-arms have become millionaires. The dazzling rise in share prices has brought this about.

The young German said: "But there is nothing special about the money. Apart from giving fundamental security it does not make much difference."

He said that he enjoyed his job. But he does not describe himself as a "workoholic," a man obsessed with the job. He said: "I don't do anything that I regard as stupid." Can he imagine that he would go into early retirement with his millions? "Not on your life. It would be too boring. I'll go off and play golf when I'm 60." He lives a short way from his old university and only five miles from the firm.

Salad and bread lunch . . . Andy von Bechtolsheim (Photo: Thierbach)

His life is spartan. He sleeps on a floor mattress. He has relented now and has at last got a cleaning women.

"Electronics and computers always fascinated me. I built lighting consoles for my school friends when I was young. On holiday I was always the one who organised the amplifier, which did not leave me a lot of time for girls," he said.

"For a long time I wanted to be a scientist, but that was too frustrating because you could not build anything."

His father is a teacher. In 1974 he won a prize in the physics sector of the nation-wide competition "Jugend forscht." His contribution was called "Precise currency measurements through ultra-sound."

After his frugal meal at Roger's Deli he jumped into his gold metallic Porsche 944 Turbo and went back to the office.

He said: "I don't mind having my photograph taken anywhere but I'm not so keen on having it taken here," as he got into his super car that has every extra imaginable.

The ten main buildings of Sun Microsystems almost make up a district of the town of Mountain View, population 60,943, that stands to the east of the Bayshore Freeway, US Highway 101.

The buildings are each about the size of a medium-sized multi-storey car park. They are set in park landscaping with lawns that would be the envy of any gardener of the Old English Garden school.

Andy explained that all the buildings were leased. "That is much cheaper than buying property. Instead of doing that we can taken on a couple more engineers from whose work we can profit."

He cannot imagine living anywhere else other than California. "First, the wind comes from the west and there is 8,000 kilometres of the Pacific out there. When I first came here I could not work properly. The weather was always so wonderful, that one felt you had to take advantage of it all the time. After a while I realised that it was always beautiful weather here."

He knows his way about the USA. He has travelled through almost every state.

He said: "When I arrived here 10 years ago for months on end I went on camping trips visiting mountains, canyons and deserts."

If the stress gets too tough he jets to Canada for a few days in the mountains. He claims to be a great nature lover. Or he goes off to Hawaii to go surfing, his second great passion.

There is unbelievable chaos on the ground floor of Annex 5. In the half-light there are dozens of partition walls, removal cases piled on top of each other and disused office furniture. We made our way along the only passage through the chaos to a corner to the left.

Bechtolsheim office is small and unpretentious, about the size of a tax clerk's office in Germany. It could hardly be described as an executive suite.

He was calm, spoke quickly and with concentration. "I can use my time as I like." He did not become a scientist but an enthusiastic designer.

His enthusiasm is a kind of modern occupational therapy for the firm. He is able to indulge his passion and bring new computers into being.

His creations regularly make front-page news in the *Wall Street Journal*.

He said that financial analysts predict that "in two years at the latest we shall break through the magic one billion dollar sales figure.

"Last year we had 1,800 employees, now the figure is about 4,000. The average age is 32."

He believes that the whole computer business is going through a revolution in which all the large, unwieldy computers could be replaced by compact computers the size of a television set.

"The difference between our company and others is that we do not produce personal computers but systems with the same capabilities, which until now only large computers possessed. That is exactly what people in companies want."

The other advantage his company has is that Sun computers are cheaper than other computers. They cost from 5,000 dollars. The largest, fitted with every refinement, cost 200,000 dollars.

"Our business is so good that we don't need to advertise. Customers come to us," he said.

His recipe for success is simple: "We want to achieve maximum success from a minimum of work." This means that individual components are purchased and assembled at Sun in the unit construction system. "We already know precisely what our requirements will be for next year. I produce a new computer practically once a year."

He arrives at his office between eight and nine in the morning and leaves for an evening meal usually about seven.

He has a couple of personal computers at home but "they are not used much. I need a break from them and my girlfriend, Susan, complains anyway."

He was last in Germany two years ago to pick up a visa. He said: "When I visit my parents on Lake Constance I see that everything is the same as it was."

He excused himself and said: "Let's see what has been going on." He raced

Continued on page 8

■ TECHNOLOGY

Arguments loom in face of plan to cut subsidies

Kölner Stadt-Anzeiger

Bonn Research Minister Heinz Riesenhuber has denied charges by the Berlin DIW economic research institute that Germany is dropping further and further behind Japan and the United States in scientific research.

Herr Riesenhuber says German industry compares well with its competitors in technology-intensive sectors.

German standards in robot, laser, biocatalyst and sensor research were little short of America's and, in some areas, ahead of Japan's.

The minister has reason for all the justification: he has to cut some direct and indirect subsidies.

Manpower subsidies for research-intensive firms are to be scrapped. This year they will total DM400m.

Special depreciation allowances for research investment are to be scrapped at the end of next year. Investment subsidies available since 1974 may also be axed.

Ministry officials admit that small and medium-sized companies will be the main losers. So Herr Riesenhuber needs to try and disarm critics by emphasising how well-placed Germany is.

Industrial sources estimate that subsidies totalling DM1bn a year are due to be axed. But what about German research? Is it really in such a fine state as the Ministry claims?

Herr Riesenhuber bases his claim on a report by the Institute of Systems Technology and Innovation Research (ISI).

Unfortunately, he forgot to mention that the ISI survey is based on 1982 figures, more recent data not having been available.

It also notes that German research concentrates less on advanced technologies than on medium-intensity research sectors such as motors, chemicals and engineering, in which German firms really are well-placed.

Yet when the overall research expenditure of the major trading countries is compared, the Federal Republic is an also-ran, according to a spokesman for the Confederation of German Industry (BDI).

US investment in research and development will total DM277.7bn this year, as against DM265.9bn in 1985.

Japan is spending DM108.2bn, as against DM84.1bn last year but one, whereas the Federal Republic, with DM59.3bn (DM52.1bn), seems at first glance to come a poor third.

The comparison is distorted by exchange rate fluctuations, however.

US investment also includes defence research contracts totalling nearly DM100bn, and research spending comparisons are difficult to draw in other respects too.

In 1985 the Americans spent only 13 per cent of their R & D budget on basic research, as against 20 per cent in the Federal Republic.

Another substantial difference is that German industry bankrolls roughly 60 per cent of its research expenditure itself, while US firms raise little more than half of the money they spend on R & D.

Even so, the growth rate of German research spending has declined, as the Research Ministry has partially admitted.

According to DIW figures the United States has increased R & D outlay by 31 per cent since 1980, as against a 25-per-cent increase in Germany and a 65-per-cent increase in Japan.

The Ministry may argue that the DIW survey is based on 1980, a year in which the German economy, and with it research spending, was marking time. But Ministry officials note with alarm the "particularly striking" efforts undertaken by Japan.

Another striking statistic compiled by the AiF industrial research association is that Japan has three times more research scientists than the Federal Republic (and the United States five and a half times as many).

Manpower and spending figures may not be a clear yardstick of success. A handful of imaginative loners can achieve more than an army of research scientists.

But the likelihood of achieving greater success by means of a higher research outlay is clearly substantial.

So the fact that per capita R & D spending, at DM970 in the Federal Republic, is roughly on a par with the US figure, DM1,140, and higher than Japan's DM890 does not in itself prove too much.

Despite being far from badly-placed, BDI spokesmen take a somewhat sceptical view of the outlook for German research.

They say it has weak spots in future-oriented sectors such as microelectronics, genetic engineering and new materials.

In the past 30 years German research scientists are said to have made not a single trailblazing discovery in molecular biology.

It looks very much as though the importance of research will continue to increase in the years ahead.

The competitive advantage and efficiency of advanced industrialised countries can only be maintained if they open up new markets with new products and problem solutions.

That is why the German electronics industry is so insistent in clamouring for strong government support.

Industrial research and development totalling DM21bn a year must, it says, continue until the turn of the century to be met largely by subsidies.

This argument is advanced in a survey entitled Microelectronics 2000 and published by industrial, university and research institute interests.

Semiconductor manufacturers are also demanding a helping hand with additional investment totalling DM14bn.

If no help is forthcoming, chip manufacturers say, the Federal Republic will forfeit by the end of the century any claim it might have to being an advanced industrialised country.

In other words, German industry is clamouring for billions in subsidies in order not to trail hopelessly behind its competitors.

There is sure to be heated argument over whether there can be any justification in handing over public funds to leading companies such as Siemens that earn profits hand over fist.

But the survey clearly shows that research has grown very expensive indeed.

Another survey by the IW research institute in Cologne notes that the time it takes for a new product to grow outmoded is growing steadily shorter while the quest for new products is taking more and more time.

It cites an impressive example from the chemical industry where, in the early 1970s, 3,000 synthetic compounds were enough to produce a single new drug or plant protective that went on to the market.

Today more than 10,000 compounds are needed to produce a drug or pesticide that makes the grade, as it were.

Manpower accounts for the lion's share of German industrial research. Another IW figure indicates that the research payroll of manufacturing industry grew by 29 per cent between 1971 and 1983 while the wage bill well over trebled!

At the same time billions are spent on keeping existing products up to date, leaving only one R & D deutschemark in four to invest in "offensive" research of the kind that is likely to achieve trailblazing results.

German research is doubtless still in an enviable position by world standards, but its research potential will need to be put to better use if it is to catch up with the United States or avoid being overtaken by Japan.

Jürgen Sussenburger

(Kölner Stadt-Anzeiger, Cologne, 1 August 1987)

Continued from page 7

the computer cursor over the screen on which messages neatly appeared.

Bill wanted to know the worth of new micro-processors. The "letter" is answered in a second.

He does not have a secretary. To his left there is a telephone answering machine which has been fed with the message: "Hi, this is Andy Bechtolsheim, you can leave a message . . ."

His "machine," or work station, known by his initials AVB, is the centre of everything. "My surname is too long for Americans and I don't get along with the von, so I've dropped it."

Every Sun employee has his own machine named in this fashion. Andy has contact with everyone and can originate circulars, question documents and so on through his "machine." This is his control centre from which he operates his kingdom in Mountain View and via which he also keeps in contact with the rest of the world.

Beside his computer there is a small piece of equipment with telescopic antennae that looks like a short-wave receiver.

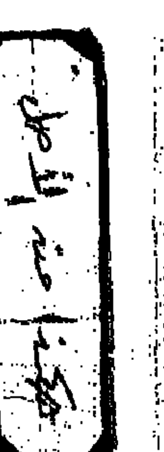
He presses two buttons and instantly the stock-market quotations for Sun shares and the shares of competitors appear. Andy murmured: "Ah, dropped two eighths."

Eventually we went into the holy of holies, a darkened room. On the desk he had built a model of next year's computer in wood and plaster. He said that he believed it would be the winner of all time "because it was smaller, faster and more efficient than anything we have had before."

All the electronic component of the new model have been reduced to the size of two postcards. Then I had to take my leave. The "machine" was calling.

Dieter Thierbuch

(Die Welt, Bonn, 8 August 1987)



■ TECHNOLOGY

Liquid-phase epitaxy: a woman makes it all crystal clear

STUTTGARTER ZEITUNG

The laboratory looks as though chemists and physicists shared it, with a tiled table-top and a ventilator hood of the kind chemists use and a man-sized electronic switchgear box with yellow and red flashing lights.

Cables and pipes converge on the centre of the room, where two quartz retorts about two metres long are arranged horizontally. It is clearly a room where precision work goes on.

Wafer-thin layers of crystals are bred in the vacuum of the glass retort. They are only a few thousandths of a millimetre thick.

Elisabeth Bauser is here in her element. Quietly, patiently, she talks about her work, showing not the slightest sign of what would be entirely justifiable pride.

Only a few days before our interview she had been in London to receive her share of the IBM Europe Science and Technology Prize, awarded this year for the second time and worth 100,000 Ecus, or about DM210,000.

Frau Bauser, a physicist, has worked since 1971 at the Max Planck Solid-State Research Institute in Stuttgart.

She was awarded the prize in recognition of "her research in the sector of atomic and molecular processes with the aid of which semiconductor crystals designed to have specific electronic properties can be bred with unsurpassed purity and perfection."

Stuttgart-born Frau Bauser shared the award with Bruce Arthur Joyce of Britain and Manijeh Razeghi, an Iranian-born woman scientist who works in France.

All three followed the same objective in their award-winning work: that of breeding the purest possible semiconductor crystals with specific optical and electronic properties. Each of them set about their task in a different way.

Frau Bauser specialised in liquid-phase epitaxy, a process with which scientists have long been conversant but which she has used to discover and make use of entirely new opportunities.

The principle of liquid-phase epitaxy — defined as the growth on a crystalline substrate of a crystalline substance that mimics the orientation of the substrate — is one that everyone can observe in the simplest of household experiments.

You dissolve as much salt as possible in hot water, saturating the water in NaCl.

Then chill the water so it can no longer absorb as much salt. It will be oversaturated and salt crystals will be precipitated.

That, in principle, is what happens in the Stuttgart research lab. The semiconductor material that is to be crystallised — silicium, gallium arsenide or germanium — is dissolved in liquid metal until it reaches saturation point.

Gallium, indium, bismuth, tin or alloys of them are used as solvents. Heated to between 400 and 700 degrees centigrade, the solution lies like a droplet of mercury on a movable crucible in the quartz retort.

The crucible is turned over for a moment, pouring the droplet over a monocrystalline wafer between 1.5 and 4 square centimetres in size.

In the process a crystal layer between 1 and 150 thousandths of a millimetre thick is formed.

Frau Bauser and her Stuttgart colleagues have succeeded in finding out how crystals grow and how their growth can be controlled.

A crystal always tries to find a germ on which to start life — a step or unevenness on the given surface.

It doesn't grow upward from the step as might be imagined; it grows along the edge, which moves accordingly.

If the step was originally only a single molecular layer tall (and wafers this thin can be produced), then a crystal can be grown that is totally flat and also only a single molecular layer tall.

Ideal crystals of this kind can be grown to sizes of several square millimetres.

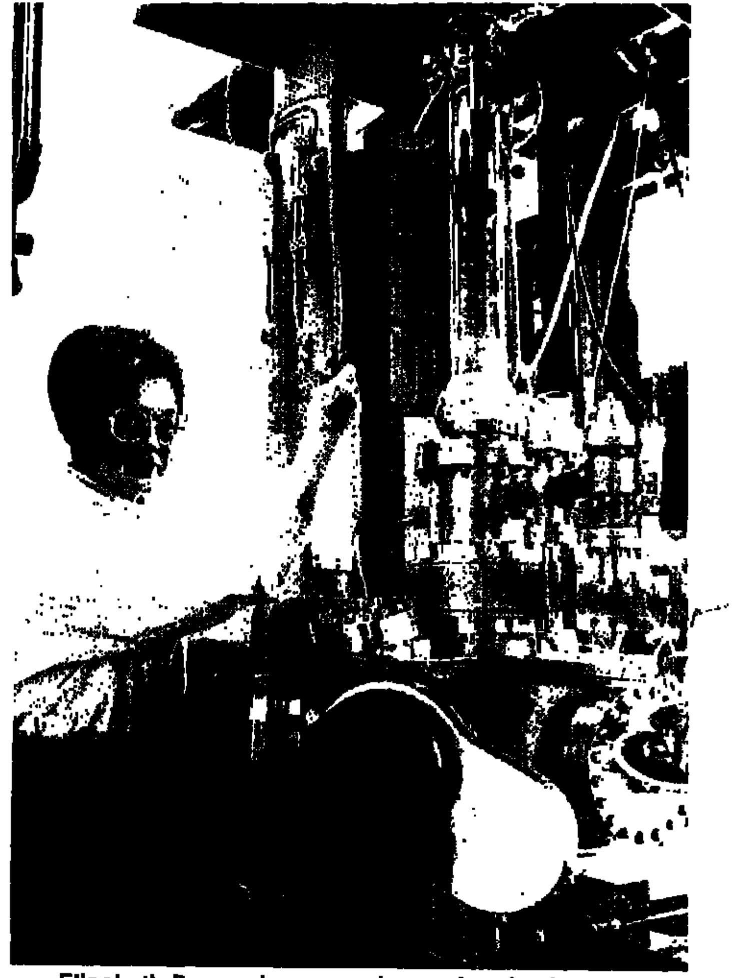
The finest crystals do not grow in crucibles. Frau Bauser and her colleagues use other techniques with which layers of crystals with different properties can be superimposed more easily.

As these layers grow at a rate of roughly one molecular layer per second, their quality depends to a crucial degree on how fast the solution is poured on to the wafer and drained off it again.

This speed is controlled in Stuttgart by using a centrifuge specially devised in collaboration with the Swiss Technical University in Zürich. The Swiss equipped the rotor with magnetic bearings to prevent oil or grime from polluting the vacuum chamber.

At several hundred revolutions per second the centrifuge can reduce growth times to fractions of a second.

Frau Bauser has helped to make liquid-phase epitaxy a serious rival of the other two processes for which her fellow-physicists were awarded their shares of the prize in London. In the late 1960s Bruce Joyce helped discover molecular ray epitaxy, a process by which the heated substrate is bombarded with a ray or beam of atoms or molecules. Manijeh Razeghi in contrast uses a much more newly-developed process known as metal organic chemical steam deposition. It aims at combining the advantages of the other two. A gallium arsenide crystal is created by bringing a hot steam mixture including gallium and arsenic into contact with the crystalline substrate.



Elisabeth Bauser busy growing molecular layers. (Photo: MPG)

The gases are then split up, the gallium and arsenic forming a crystalline compound on the wafer surface.

Why go to all this trouble? Frau Bauser's crystals are used in basic research by fellow-scientists at her Stuttgart research institute.

They try, for instance, to find out what changes a semiconductor's properties undergo if it is deliberately polluted.

IBM Europe may pride itself on not awarding the prize in connection with industrial research, but findings of this kind are indispensable for chip manufacturers.

The thinner the semiconductor wafers can be bred and the more exactly their properties can be arranged, the faster computers using chips made of this material will work.

So the jury has awarded the prize for work in a research sector not a million miles away from IBM's interests.

The independent jury includes Nobel laureates Leo Esaki and Ilya Prigogine. Its German members are Gisbert zu Putlitz, vice-chancellor of Heidelberg University, and Hans-Joachim Queisser, head of the Stuttgart Max Planck research institute where Frau Bauser works.

Rainer Klüting

(Stuttgarter Zeitung, 1 August 1987)

Mathematicians meet under the snowdrops

For most people snow crystals are a fleeting thing of beauty. Mathematicians also find them interesting from a scientific viewpoint.

Leading mathematicians have for years looked into how a snow crystal takes shape. Scientifically they rate it a "free marginal value problem."

High-powered computers and advanced mathematical formulas have been harnessed to describe the growth of simple crystals in laboratory tests.

But the bizarre phenomenon has yet to reveal its every secret.

Over 200 scientists from 25 countries met at Irsee in the Bavarian Alps to discuss crystalline growth and other issues in an International Colloquy on Free Marginal Value Problems.

Topics mathematicians approach in this way include the way in which toxins are spread after an accident, how salt is separated from sea water and liquid flow forecasting.

Mathematicians can thus be seen to have left the realm of abstraction and to be on their way to dealing intensively, and in an interdisciplinary fashion, with — let us say — facts as well as figures.

Professor Richard Hart of Tulane University, New Orleans, La., is a recognised expert on mathematical calculation of bone growth after accidents. He has devised models that describe growth in detail.

The next step will be to forecast bone growth in detail. "Many knee or shoulder joint transplants have failed because the bone developed other than in the manner intended," he said.

Applied mathematics was in a position to forecast the course of growth and thus ensure successful surgery (at least in this respect).

Extremely complicated calculations were involved. They could only be carried out with the aid of computers.

Today's mathematical models have long ceased to have much in common with Pythagoras. Many theorems are so complex they can only be outlined by means of video films.

Professor Karl-Heinz Hoffmann, who teaches applied mathematics at Augsburg University, said: "We take eight hours to calculate the minute period of time in which a snow crystal grows to a diminutive extent."

Mathematical formulas and models are also used in aerospace research. "Memory metals" such as titanium-nickel alloy can be used to stow antennas in space capsules that open out into their operational shape when subjected to heat in outer space.

This new generation of metals might conceivably be used in aero engines too, said Professor Martin Glicksman of the Polytechnical University in Troy, N.Y.

Professor Julian Szekely of the Massachusetts Institute of Technology (MIT) feels applied mathematics is only at the outset of its possibilities of solving free marginal value problems.

If, one day, it succeeds in calculating the growth of mineral crystals there will be a groundwork for devising new semiconductor alloys for use in computer technology.

He and his associates are working under high pressure to solve the problems associated with crystal calculations.

None of the scientists at the Irsee gathering was prepared to forecast what conclusions might be derived from the solution of another unsolved question.

The laws by which liquid movements are governed apply equally to ocean wave movements. Once they are known, wave movements can be forecast.

So can the spread of toxins after an accident — either man-made or a natural disaster. The prevention or containment of both would be invaluable.

High-powered computers and new mathematical formulas may well be able to solve these questions before long.

(Nürnberger Nachrichten, 5 August 1987)

■ MUSIC

There's nothing quite as grand as a Steinway

RHEINISCHER MERKUR

Artur Rubinstein once said there was nothing in the world like a Steinway piano. He also once said that he would never visit or perform again in Germany.

Well, he did come to Germany again. And the reason was Steinway. In 1966 he came to Hamburg to collect his old piano from Steinway & Sons where it was being repaired after being damaged three years earlier in Israel.

He recognised it from among a dozen others because of its tone and he greeted it with a kiss.

People still remember how Rubinstein tested every key, every one of the 88 notes in various shades of tone and tried out the instrument's whole dynamic range.

The Steinway staff were treated to a concert by the great pianist, who expressed his delight in the inimitable sound he produced from it.

The name Steinway comes from Germany, but the company's headquarters are now in New York. There is a factory in Hamburg and a sales centre in Berlin.

Although Steinway is no longer the largest piano manufacturer in the world, in volume terms, it is the most famous, exclusive and the best, say many, many musicians from Richard Wagner to Keith Jarrett.

Hamburg pianist Christoph Eschenbach described his Steinway as "a first-class work of art" with "matchless tone." Wilhelm Kempff regarded a Steinway piano as the "fulfillment" of a pianist's life.

The company's history began in 1797 in Wolfshagen im Harz. Heinrich Engelhard Steinweg was born there on 15 February of that year. He was the third son of a master charcoal-burner.

When Heinrich was 13 his mother died. His father married again but a year later she died, too.

Then Heinrich's father and his second eldest son were hit and killed by lightning. Heinrich saw it happen.

There was nothing in his youth to indicate that he would become world famous. After his military service he was apprenticed and eventually became a master carpenter.

He married in 1825, settled down and opened his own workshop in Seesen in the Harz. In 1836, partly in his workshop and partly in the kitchen, he built his first piano. He had already tried to build a zither, guitar and a small organ.

Heinrich Steinweg quickly recognised his own talent and saw the opportunities.

Three years later he was awarded first prize at the Brunswick Fair for a piano he had built.

The Steinweg family business advertised its pianos. Heinrich Steinweg announced in a weekly paper: "I guarantee my pianos for any period of time the purchaser cares to name. The price of my intruments is relatively inexpensive."

Nevertheless sales possibilities were poor. Customs after 1843 were restrictive. During the political disturbances of 1848 the situation got even more precarious. Heinrich's second eldest son Karl got embroiled in the Revolution.

Eventually Karl emigrated to America and changed his name to Charles.

Charles was so enthusiastic about the opportunities in the New World that a year later Heinrich Steinweg decided to follow his son with the rest of the family.

Heinrich Steinweg with his wife, five sons and four daughters boarded the "Helene Sloman" bound for New York.

He sold his house and workshop for 2,460 thalers. Only his eldest son Theodor remained in Germany.

As was usual at the time the family "Americanised" the family name to Steinway, not Stoneway which would have been a direct translation of the German name. The family wanted to retain a little of their German origins and past.

The Steinways were soon successful in America. Heinrich and his sons at first worked in a number of piano factories in New York. When one of these factories was hit by a strike the Steinways made use of this opportunity to build their own pianos again.

In 1853 they founded their own company, Steinway & Sons. The internationally-famous company was born.

The family business rapidly rose to success. By 1864 the Steinways owned the largest piano factory in the world.

The firm won one international prize after another for its products. In 1855 they won first prize at the New York Industrial Exhibition for their pianofortes and in 1862 Steinway captured the first prize at the World Fair in London.

He did the same thing five years later in Paris, where one of the prize judges was Eduard Hanslick, admired and feared for his sharp-tongued criticisms.

A report of the time said that Steinway & Sons combined German industry with American vision.

The company used what could be called for the time "high tech" in building instruments. One international patent followed hard on the heels of another (altogether more than 100). Tirelessly the Steinways looked for new technical ways of building pianos and pianofortes, always seeking to produce the perfect tone.


From master carpenter to piano maker . . Heinrich Engelhard Steinweg. (Photo: Steinway & Sons)

Piano-builders Steinway were also excellent salesmen. Salesrooms were opened in London in 1875 and a German subsidiary, Steinway & Sons, was established in Hamburg with its own production facilities.

Reunion . . . Artur Rubinstein greets his old piano in Hamburg in 1966. (Photo: du Vinage)

Eldest son Theodor, who had remained in Germany, moved to America. The family asked him to join them after the death of the brothers Albert and Karl.

Nevertheless Theodor's name lived on in Germany. He had also set up his own firm to build pianos, Grotrian-Steinweg of Brunswick. The company still exists and enjoys a splendid reputation.

The history of the Steinway company is also an important chapter in cultural history, if only because all concert pianists at the end of the last century performed on Steinways

In 1866 the Steinway Hall was opened in New York and remained the city's most famous concert hall until the Carnegie Hall was built.

Almost all the most famous artists of the second half of the 19th century played there, naturally on a Steinway piano.

At the end of the last century the successful company built a small village of homes for its workers which included a library and a school where 500 children were taught German and music free of charge.

For years on end the company's "working language" remained German.

The driving force behind all these undertakings was William Steinway, the sixth child and fouth of Heinrich Steinway's sons.

He was a deeply involved man whose interests extended far beyond his instrument building and his company.

He took part, for instance, in the planning of the New York subway, and set up a ferry connection to the Steinway factory on Long Island. He founded, with Gottlieb Daimler, a motor company.

For many years the Steinway company was involved not only with grand pianos and pianofortes but also with internal combustion engines for ships and automobiles.

But despite these diversions William and his brother Theodor devoted themselves whole-heartedly to the construction of pianos.

By 1872 Steinway & Sons had built 25,000 instruments. The 25,000th grand piano went to the Czar's court in St Petersburg, the 50,000th was delivered to the banker Rothschild in Paris.

The Prussian King also played a Steinway as did Richard Wagner who in 1875 expressed his gratitude for his "matchlessly beautiful" grand piano which "deserved a better performer" than he was.

A Steinway was delivered to the White House in Washington in 1903 for concerts in the presidential residence. In 1938 the 300,000th instrument was installed in the White House, decorated with marquetry work and motives from American musical history.

Steinway knew only too well how to satisfy customers' extravagant wishes. The company delivered pianos built in the roccoco style, instruments made of mahogany or jacaranda, lacquered white or black.

It has also supplied special instruments for Russian television. Two concert grands were supplied in the shade of red that exactly matches the red of the Soviet Union flag.

Musicians also make special demands for their instruments. Vladimir Horowitz has a Steinway whose keys are not built for the usual finger pressure of [illegible] grams but ten grams less for his lighter touch.

Steinway built a piano for him that now acompanies him on all his concert tours. For decades it has travelled from one continent to another.

Arturo Benedetti Michelangeli has two Steinways that go with him on his tours.

The company remained in the family for almost a hundred years, until 1972, when the New York company and the factory in Hamburg were taken over by the American media giant CBS.

The number of family members became too many to enable it to pursue a uniform policy. One report said that the various family lines were unable to subordinate their interests so that the company could be commercially viable.

Two years ago the company returned to private ownership when four American businessmen acquired it.

Since 1853 Steinway has delivered almost half a million grand pianos and pianofortes to all parts of the world. The 500,000th instrument will shortly be completed. The company is not prepared to say whether it is being produced in New York or Hamburg.

Every instrument is listed in the company's records, including five salon pianos that went down with the "Titanic."

There are about 12,000 separate parts in a Steinway concert grand, all made by hand. It is not surprising then that it takes almost a year to produce a single instrument. An ordinary piano is finished in about eight months.

The price of a grand piano is between

Continued on page 11

■ COMMUNICATION

Esperanto still setting tongues wagging 100 years after Unua Libro

Esperanto, la lingvo internacia, ne estas mortinta; the international language, Esperanto, is not dead.

It is alive and 100 years old. Which is an appropriate enough point to see if it is kicking as well.

The birth of the language was marked by the publication of Unua Libro (First Book) by the Jewish ophthalmologist Ludwig Lazarus Zamenhof, who called himself Dr Esperanto (The Hopeful One).

He grew up in Bialystok, Poland. His father was a language teacher. Early in life Zamenhof got used to the hubbub of languages in eastern Europe. He saw that the mistrust that existed between the various national groups arose from their inability to understand each other.

He did not devise his language, then, as a linguistic exercise but from practical considerations mixed with brotherly idealism and an attempt for peace. He wanted to create a "language bridge," a means of furthering international understanding.

He worked towards his aim while he studied. His father-in-law backed him financially so he could publish his First Book.

More books on the basics of Esperanto followed, but at first public interest was limited.

The first magazine in Esperanto was published in Nuremberg, but not much notice was taken of it. It did, however, attract some attention in Czarist Russia, where it was banned because of an article written by Tolstoy.

It seemed as if Esperanto would share the fate of "Volapük," a difficult-to-handle, comical idiom developed by a minister from Constance in 1880 which disappeared without trace at the turn of the century despite a promising beginning.



Zamenhof's language was of better quality. Anyone can learn and speak it without too much effort and make others understand whose mother tongue is different.

The language's worth was proven in 1905 at the first major Esperantist congress at Boulogne-sur-Mer. Straight away the 700 participants from many different countries understood each other. World War One brought an end to the dream of giving people a means of understanding each other.

Then Esperanto experienced a new flowering among workers and not only in Germany. More than 5,000 attended the world congress in Nuremberg in 1923.

Hitler regarded these citizens of the world with their "interlanguage" as suspect. In 1936 Esperanto was banned.

Other dictators followed suit, Stalin in Russia, Franco in Spain and Salazar in Portugal.

In 1945 it was vital for the language to have a new beginning, particularly in view of the dominance of English.

The prospects looked uninviting for an artificial world language, although it did have advantages over English with its many irregularities and pronunciation problems.

Esperanto was often been spoken of favourably in the United Nations and Unesco. But Esperantist circles persisted in remaining, unintentionally, exclusive.

There are about a million people today who use Esperanto. There is much interest in China.There are supporters of Esperanto in every country in the world. Travelling Esperantists claim that, like Rotarians, there is no place where they do not have friends.

But the political pressure of the Esperanto movement is limited. National pride demands a national language.

In the written documents of the European Community alone many millions of marks would be saved per year if Esperanto was used as the bridging language.

This is how Zamenhof hoped his idea would be understood.

He believed that the Lingvo Internacia would amplify, not replace, a national language.

A British linguistics professor once wrote that Esperanto united the power of English, the depth of German, the elegance of French and the melodious sound of Italian.

The language's considerable flexibility stimulates creative phraseology and gives pleasure.

The beginner does not have to devote effort to exceptions. The rules of Esperanto are simple and they apply absolutely.

The capacity to express ideas is embedded in the vocabulary which is drawn mainly from the romance languages.

No other language is tailored to be so concise as this language by words using suffixes and prefixes.

Conjugations permit more precise forms of expression than in other national languages.

A completely modern aspect of the language is that no living language is better suited for use in computers.

There is plenty of literature in Esperanto, original and translations. There are magazines and broadcasts.

There is an Esperanto Association and Congress, language couses and opportunities to practice speaking the language.


The Hopeful One . . . Ludwig Zamenhof. (Photo: dpa)

There are specialist Esperanto groups of railwaymen, philatelists, Catholics, teachers and the blind.

Esperantists have mainly themselves to blame that they are regarded as airy-fairy idealists.

They should open themselves up more to the world. They should emphasise the usefulness of speaking Esperanto and the pleasure it can give more strongly rather than the political ideas of peace and understanding between peoples, so often abused.

Although Esperanto is 100 years old it is still modern. It has survived all other "artificial" languages because it has a genius of its own and has developed in practice.

It has adjusted no worse to modern conditions than it did in Zamenhof's time.

The technical conditions for furthering the language are better now than ever before. Should not more be done about it?

Gerold Lingnau

(Frankfurter Allgemeine Zeitung für Deutschland, 28 July 1987)

Continued from page 10

DM19,000 and DM27,000, a concert grand can cost anything from DM42,000 to DM100,000. Extra charges are made for special specifications such as gilded legs.

Only choice woods are used in the manufacture of the instruments. Spruce trees have to be between 700 to 1,000 metres tall for their wood to be used. Beech is used and certain of the 200 types of mahogany, jacaranda, maple, yew and whitewood.

The tuning board of a Steinway is made of six layers of hardwood glued together. This tuning board, together with the metal cast plate, has to withstand a constant tension of 20 tons.

Hamburg is represented by over 250 selected specialist dealers all over the world. New York supplies America and Canada.

This year the Hamburg company has listed 1,300 grand pianos and 300 pianos in its work book, the New York factory 2,200 grands and 800 pianos.

In musical circles the Hamburg-made instruments are regarded as marginally better than those produced in New York. No-one is prepared to be specific about this. But if it were not true would Artur Rubinstein have had to break his word?

Gabriel Nay

(Rheinischer Merkur/Christ und Welt, Bonn, 2 August 1987)

Data processing looks for universal jargon

Speed of data processing is becoming more and more important. The faster a computer can process information the better.

Development in the field is still in its infancy, say experts. Yet advances in many fields are so rapid that jargon cannot be standardised quickly enough to enable information to be processed adequately.

New products come on the market under several names. One firm can have between 10 and 20 names for a single product.

If information about these products is to be processed and disseminated in the marketplaces of the world, they must have standardised names. Otherwise there is confusion.

At the moment, the lack of standardised jargon is causing confusion even between specialists within the same discipline. It causes translators to make mistakes, it hinders the dissemination of knowledge and it makes technology transfer more difficult.

Scientists in America recognised as far back as the 1950s that a lack of, or mistaken communication, could lead to gaps in information.

Knowledge needs a suitable organisation structure and a medium so that it can be properly presented.

For some time scientific activity has been involved in classifying, systematising and providing terms for matters of fact.

The systematic examination of such regular patterns holds pride of place in the terminology that has come to be accepted as generally valid.

Therefore expressions are the basic elements of our knowledge and terminology is the scaffolding for the expression of that knowledge.

Formal organisation structures for knowledge are developed, particularly in research, by artificial intelligence.

Computer language science is in part concerned with keying in and processing our knowledge. The variety of knowledge is at present only elucidated adequately in certain sectors.

Terminology and the methods of data elaboration strive to make sense of the information chain. Terminology examines real knowledge forms presented in specialist and scientific language. The results of these researches are valid and precise conceptual structures.

On the other hand the methods of data elaboration are based on formal linguistic structures. They try to fashion these for general application.

Until now both specialist disciplines have developed mostly alongside each other.

In combination experts believe positive impulses for overcoming problems would result.

The aim of the international congress on "Terminologie und Wissentechnik" that is scheduled to take place in Trier at the end of September is to bring order to this language tangle.

The prime question that will be examined at this event is: "Aided by computers how can an optimum arrangement and structure be brought into the constantly increasing flood of knowledge."

One example is obvious: annually between 150 and 200 billion book pages are translated into more than 5,000 languages.

About one per cent of this mass of text is processed by computer. Actually every second page could be translated more rationally by computer than by traditional methods.

Linguists recognise that not only professors should look into new methods of data elaboration technology, but doctors, lawyers, engineers and skilled workers.

Recently large companies have began to make provision for the cost of information in their balance sheets.

Harald Watermann

(Die Welt, Bonn, 28 July 1987)

■ MEDICINE

Child cancer victims not given enough painkillers 'out of ignorance'

STUTTGARTER ZEITUNG

Children in pain from advanced cancer are often not given enough painkillers, a conference on pain has been told.

A Canadian specialist, Ronald Melzack said this was because of the widespread but mistaken assumption that children feel pain less than adults.

He told delegates that doctors were far too slow to use painrelieving opiates. They should not be so afraid. The risk of addiction later was far less than many doctors thought.

Raymund Pothmann, who works at a clinic in Wuppertal which is the only one in Germany specialising in chronic pain in children, outlined its work to the conference, the Fifth International Congress on Pain, in Hamburg.

About half of all young people up to the age of 14 know from personal experience what splitting headaches are like.

One per cent of children under seven suffers from migraine, and the percentage steadily increases with age. Experts say this is because of excessive stimuli both at school and outside.

Professor Michael Zenz, of Bochum, said an estimated 60 per cent of cancer patients in the Federal Republic need to be prescribed morphium-based drugs to kill pain. But surveys show that few doctors are prepared to prescribe them.

What drugs effectively kill pain and in what combination can they be administered? The congress was attended by about 3,000 scientists from over 40 countries.

Other questions dealt with included how pain occurs, how it passes through the body, why cancer patients often don't feel pain until it is too late yet suffer from crippling toothache resulting from the smallest and most insignificant of cavities.

Are there any new drugs with which to treat widespread complaints such as migraine, backache and rheumatism? These and other questions were raised and discussed at length.

A summary is bound to arrive at the unsurprising conclusion that a pain-free life is inconceivable and that only slow progress is being made toward keeping pain in check.

In some sectors headway may be swifter, in others it is more protracted. Rheumatism comes in the latter category, although more is now known about the effects and, above all, side-effects of drugs used to treat it.

Hopes of progress being made by means of drugs such as Interferon and Cyclosporin that have proved their worth in other medicinal contexts have failed to live up to expectations.

Yet in many cases it is not the effective drugs that are lacking but the wrong use of drugs and the failure to use other means of treatment that combine to make the pain even worse.

Given the right treatment many people who suffer from chronic headaches could be helped far better than they have been, the experts agreed.

They were particularly keen to see a ban imposed on combination painkillers.

Many doctors, the Hamburg congress was told, know much too little about what can be done to treat migraine and other chronic complaints that cause pain.

"Pain," Manfred Zimmermann of Heidelberg said, "is not a subject dealt with at German universities."

Accompanying and new methods of treatment were dealt with in detail and at length in papers and debates.

Acupuncture was agreed to be most effective in treating migraine when it was correctly used. Relaxation training, sport and massage can similarly be most effective.

An attempt must also be made to persuade patients to come to terms with their complaint and with the pain that accompanies it rather than to resort to one new and more powerful drug after another.

In the final analysis even the most powerful drug will end up being more or less ineffective.

"Patients must learn to help themselves in other ways," said Eldon Tunks, a Canadian who works in a pain clinic alongside anaesthetists, psychiatrists and physiotherapists.

Patients at his clinic are not just given in-house treatment. The outpatient service also helps them after they leave hospital.

"Patients must be enabled to lead an active life again," he said. They were told that the pain would continue but that they would feel better.

Karsten Plog

(Stuttgarter Zeitung, 8 August 1987)



A woman in pain

Hamburg artist Jürgen Bordanowicz has won the 8,000-mark prize for his Portrait of a Suffering Woman. 500 artists entered the competition, on the subject of pain, promoted by the German association for the study of pain. (Photo: Kupe)

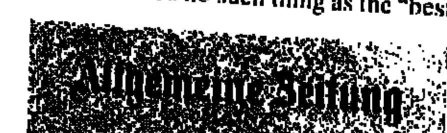
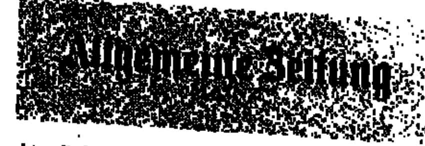
Doctors can usually do little for backache, says specialist

Backache is seldom helped by doctors; 95 per cent of cases recover spontaneously within two or three weeks, Swedish orthopaedic surgeon Erik Spangfort says.

Professor Spangfort, of Huddinge University Hospital, was in Hamburg for the Fifth International Congress on Pain.

He told the German newsagency, dpa, in answer to a question, that acupuncture could ease back pain but not cure it.

Kay Brune of Erlangen University said there was no such thing as the "best

drug" for treating arthritis. It was up to the medical profession to prove its skill in using tried and trusted methods.

Professor Spangfort admitted that doctors were in a difficult position. One reason was that patients were not, as he saw it, examined carefully enough.

He complained that orthopaedic surgeons did not, as a rule, consult other specialists in connection with diagnosis and treatment.

It was extremely difficult to pinpoint the cause of backache. In many cases there were organic causes.

Doctors must, he felt, learn to make sure that a patient's backache did not assume chronic proportions. Only about five per cent of patients suffered from chronic backache of this kind.

They spared neither effort nor expense in their bids to get rid of the pain. They accounted for 80 per cent of expenditure in the orthopaedic sector.

Asked how he felt about acupuncture, he said it could ease the pain but not cure the backache.

Professor Brune said tried and trusted non-steroid drugs were still the best way of treating arthritic pain and inflammation.

The latest experiments with drugs such as Interferon and Cyclosporin that affect the body's immune system had not proved very promising on closer scrutiny.

Gisèle Guilbaud of Paris and Robert Schmidt of Würzburg presented research findings indicating that simple rheumatism drugs blocked sensitivity to pain right in the joint rather than via the nervous system.

There are about 2,000 nerve-ends in a joint. They are normally insensitive but can, in the sick, respond to and register pain.

They were activated by biochemical changes resulting from inflammation, Professor Schmidt said. Other agents

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■ THE ENVIRONMENT

Organic vegetable farming not better, says survey



The differences between vegetables grown traditionally and those grown organically cut both ways, says a report.

The authors say neither form of cultivation has a clear advantage. Wilhelm König and Jörg Leistner of the North Rhine-Westphalian Ecology, Rural Development and Forestry Planning Institute's Düsseldorf branch office, compared samples from the Cologne-Aachen area.

Organic farmers use neither artificial fertiliser nor chemical pesticides. Instead, they spread and spray natural substances, such as compost and liquid herbal manure.

Scientific opinion differs strongly on whether the organic farming is better. A Dutch survey found the organic system to be much better; an earlier German survey found no notable differences.

The Düsseldorf findings do not tally with either of these conclusions, as the details for carrots show.

Comparison over a three-year period showed organically grown carrots to be superior mainly in containing a higher dry mass count. In other words, they contained more vegetable substance and less water.

Conventionally grown carrots were found to contain a higher count of nitrate, undesirable because it may cause cancer, but a level still well below the safety margin prescribed for dietetic foodstuffs.

Conventionally grown carrots came off better in comparison of sugar counts. They contained more saccharose, which meant they tasted better and kept for longer.

They also contained a clearly higher level of potassium and calcium. König and Leistner say the higher dry mass count of organic carrots offsets this shortcoming to some extent, but they feel unable to express a clear preference for one variety or the other.

Their findings tally with eight-year trials carried out at the Orchard and Vegetable Farming Research Establishment in Auweiler, Cologne.

Since 1978 nearly all conventional vegetable crops have been grown on a one-acre site in strict accordance with organic principles using straw as compost.

Fears of pests ravaging the crops proved groundless but, as Ulrike Lindner of Auweiler put it, organic methods were found to be more difficult and more exacting than might have been imagined.

Farmers and market gardeners interested in an alternative approach must, she says, keep a keen eye on developments and be well-versed in ecological affairs so as to be able to intervene in natural processes as gently as possible and at the right moment.

Even then, alternative crop yields will be lower than those of crops conventionally grown. In Auweiler the shortfall was a hefty 17 per cent, nitrogen supply is one of the main reasons.

Nitrogen occurs in natural compost but must first be converted into nitrate by bacteria in the soil.

The more nitrogen a plant needs, the higher the conventional crop yield will be in comparison — and, of course, vice-versa.

With crops like carrots that need very little nitrogen the difference in crop yield is undramatic.

Organic farming, Frau Lindner says, is much harder work. The compost must first be made up of straw. Weeds must be kept at bay mechanically. The man-hours mount up.

But the difference in labour input declines over the years as farmers gain in experience. She also sees opportunities of rationalising compost-making.

Yet organic farmers earn a living despite longer hours and lower yields. They need to charge an extra 50 per cent to cover the cost of these extra factors.

Earnings 50 per cent above the conventional average are a distinct possibility. Even higher prices can be charged, although marketing arrangements are still somewhat haphazard at times.

Organic crops grown at Auweiler are highly rated by consumers. Samples of organic fruit and vegetables have invariably been rated tastier by consumers (who were not, of course, told the purpose of the tests).

These findings differed from tests involving professional tasters, whose tongues and palates were unable to sense any difference between organic and conventional samples.

Nutritional analysis showed the difference, in keeping with the Düsseldorf findings, to be unspectacular.

Alternative vegetables were found to contain markedly more vitamin C and fewer nitrates.

"Organic farming is feasible," says Ulrike Lindner after eight years of trials. But a farmer must be convinced he has made the right decision in making the change.

Organic farming may earn him more but it is harder and more exacting work that calls for commitment on the farmer's part.

Dieter Schwab

(Hannoversche Allgemeine, 18 July 1987)

Weedkiller

Jürgen Kupke, a soil conservation specialist, who has developed a system of using cardboard rings to prevent weeds from throttling plants. The rings, laden with dung, are placed around plants. Underneath moisture is absorbed and microscopic organisms allowed to enrich the earth. It is claimed weeds don't grow. The cardboard disintegrates harmlessly in about three years. (Photo: AP)

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inhibited activation. Painkillers based on morphium, which have so far been felt to work solely via the brain, can also block nerve-ends in a joint and bring rheumatic pain to a halt.

In very serious cases morphium-based drugs could, he felt, be used.

A Frankfurt study group said about 1,400 medical practices needed to be set up in the Federal Republic to treat patients suffering from chronic pain.

Including special clinics there were at present only 95 to treat 450,000 patients suffering from pain caused by one complaint or another that failed to respond to conventional treatment.

The Frankfurt group, which concentrates mainly on pain research and continuing training for doctors, has branches in eight German cities.

(Allgemeine Zeitung, Mainz, 5 August 1987)

Agricultural machinery 'ruining soil'

Farmland is being damaged because agricultural machinery is becoming heavier, more powerful and more widely used, says a survey.

The soil is the loser. It is increasingly compressed by tractors, combine harvesters and other machinery.

The quality of farmland can decline markedly as a result. Inadequate nutrient supply used to be mainly to blame for low yields; it is now often joined by damage caused by the soil being compacted.

The survey, carried out for the Bavarian Environment Ministry by Rainer Horn, who is a Bayreuth University soil physicist, describes what happens when the soil is churned up by tractor tyres.

Soil, he says, has a natural support, a structure consisting of expanded clay aggregate, clay, sand and humus.

This substratum expands and contracts in the soil, forming a grid that supports the topsoil and ensuring sound soil structure.

Healthy soil can withstand the pressure of tractor tyres and has sufficient bant to spring back into shape. Any compacting that occurs can at least be offset in part.

These stabilising aggregates cannot withstand unlimited pressure. There is a limit to the stress a given variety of soil can withstand. If it is exceeded the aggregate is compacted, water is pressed out of the topsoil and the soil is rutted for good.

Deep ruts and churned-up soil are unmistakable danger signs.

When this point is reached will depend mainly on the variety of soil and on its humidity. Heavy, clay soils are much more sensitive than sandy soil. The wetter soil is, the more readily it can be compacted.

The reason for this could hardly be simpler. Soft and soggy aggregate is less firm than the hard, dry variety.

The consequences for crop plants are serious. Soil ventilation deteriorates, leaving roots starved of oxygen and water less easily accessible.

Cohesive forces retain the water — and the nutrients dissolved in it — more firmly in small-pore soil than they would in more loosely-packed earth, which can lead to lower yields.

The growing threat of erosion is a further problem. Once the system of cracks and fissures in the soil has been destroyed, rainwater can no longer penetrate fast enough. It is drained off superficially and carries off topsoil with it.

Compacting of soil is very difficult to reverse. Attempts to plough deeper and ventilate it better have often failed, merely transferring the compaction to a lower stratum.

Horn feels nature's self-recuperative capacity is the sole hope of recovery, nature in this case consisting of a combination of the earthworm and ground frost.

Ice that freezes in the soil expands and can thus open up compacted earth. But even in fallow fields it can take years for the soil to regenerate.

So the aim must be, as far as possible, to prevent overexposure to strain in the first place.

Horn has experimented with vehicles, driving them over ground in which sensors that respond to pressure have been driven.

He has found that soil is damaged less by low-weight tractors crossing frequently than by juggernauts churning up the soil less often.

A heavier vehicle weight, it was long felt, could be offset by a larger tyre surface area. But the Bayreuth readings disprove this assumption.

Tyre pressure spreads through the soil in what Horn describes as onion fashion. The narrow tyres of a lightweight tractor produce a correspondingly small onion.

The jumbo tyres of a larger agricultural machine may generate the same pressure per square centimetre but the larger surface area makes the "pressure onion" expand.

As a result the strain is sent deeper into the ground and the soil is impacted even further. So the only way to reduce the pressure is to fit larger tyres to smaller items of machinery.

Farmers need no telling another golden rule to limit the burden on soil structure. It is to drive on to fields only in dry weather when the soil is stable.

The Bayreuth University research is aimed at providing aids to arriving at decisions on handling soil carefully.

With the aid of his test series Horn has developed systems of equations from which compaction can be forecast in advance.

His measurements and estimated are to serve as the basis for a set of charts to be published by the Bavarian Environment Ministry.

It will provide information on risks to which soil is exposed along lines similar to the existing "erosion atlas."

Planners and farmers will be able to assess the risks of compaction at a glance and undertake relief measures in good time.

Bernhard Borgeest

(Süddeutsche Zeitung, Munich, 6 August 1987)

■ HORIZONS

The aerial dilemma of a high-flying executive (or, never sign anything)

DIE WELT

Nick Peters is always in the air. As a marketing adviser in Frankfurt, he hasn't any other choice. He flies often six days a week and doesn't think twice about it.

Until now. His uncomplicated relationship with fresh air has run into complications.

It happened one day when he found himself clad in a parachute harness at the top of a 12-metre tower at the Luftlandschule in the Bavarian town of Altenstadt. What was he doing there? That was the question he asked himself.

What he was about to do (or not to do) had been achieved by 80,000 before him. They had all, wait for it, JUMPED. Go on, you great big blubbering sook: JUMP.

Below, waiting for his hurtling form was the ground. There was also a nasty man called Mr Altenhöner who was yelling nasty things.

Peters' fix was caused by a foolhardy moment when he had signed on the dotted line to do a weekend seminar with an organisation called Gesellschaft für angewandtes Management (GAM) or Society for Applied Management.

Participants do an outdoor training course which includes exercises similar to survival training. They spend two days and two nights fording rivers, thrashing through impenetrable land, building temporary accommodation with a minimum of equipment and eating whatever nature offered, from frogs legs to dandelions.

Tests of man and mettle like the leap from the tower and a rope descent of a 25-metre vertical surface are included. The aim is not just for its own sake. It is to develop the capability of forging team spirit with the aim of improving their management capabilities.

Society chief Rudiger Olschowy says: "Most of the activities are with two-man teams where one member is totally reliant on the other." Ideally, two people from the same firm who work closely together in their jobs would take part.

"During training, they help each other in difficult situations and, through this, become close friends. Olschowy sees the training as a way of improving cooperation at work. He says it increases the capacity to handle stress.

Nick Peters found the ideas behind the course plausible. He found it less plausible from the top of the tower down at the gravelly ground and at the wiry figure of Mr Altenhöner.

Mr Altenhöner is in reality Lieut. Col. Klaus Altenhöner, an army instructor in his mid-40s who runs hand-to-hand combat courses. Nick Peter's 80,000 predecessors to take the plunge from the tower were paratroopers, some of whom have been trained by the Colonel.

But this weekend, Lieut. Col. Altenhöner is a private citizen running the society's course — although you wouldn't think so from the horrid way he talked to Nick: "Dr Peters, grit your teeth and jump! Well, what are you waiting for, Herr Doktor? Don't he lily livered! Jump! Nothing can happen to you! Don't think about it! Just jump!"

"I can't," Nick Peters replied quietly. "Yes you can!" yelled the lieutenant, and clapped his hands twice. "80,000 have done it ahead of you and the refusals are one in a million." But Peters at this moment was not impressed with statistics. "Then I'm the one in a million," he obstinately cried. He hesitated another three seconds — then sprang.

When all course members had run (or, in this case, jumped) the gauntlet, there was more to come. They were all blindfolded and taken by jeep to an unknown point. Their task was, using compass and map, to find their way 25 kilometres to another given point where, without technical help, they were to build a shelter. Neither hitch-hiking nor use of main roads was allowed.

The marchers set of through the night in teams of two. It began to rain. They helped each other over barbed wire farm fences, staggered through mud, fought with exhaustion — and broke the rules.

It was nearly two in the morning when Messerschmitt-Bölkow-Blohm manager Ingbert Bastian and his companion heard the distant sounds of music. Oh, what bliss, what blessed relief.

"C'mon, me old sunshine," said Bastian. "We're going to go and sink a pint or two. There ain't no innovation without flexibility, my boy."

The followed the music and discovered a party taking place in a beer tent.

Then they discovered they had no money with them. It was up to Bastian to test his abilities as a salesman: it didn't take two minutes for him to convince the publican that he was a fit and proper person to be extended credit.

They quaffed a beer each to give them the energy for the last kilometre.

Two hours of sleep had to be enough that night. The day was needed to obtain food. That meant killing what was available wild: hares and chickens, trout, plants for plant soup.

The seminar ended with a slap-up meal at a top Munich restaurant. Ingbert Bastian is not the only one who, despite blisters and tiredness, was in praise of the weekend for its usefulness.

He thought that it might have been better if he had taken part together with one of his less-liked colleagues because, he says, many apparent problems have their roots not in reality but in personality clashes.

He will have the chance: at the next weekend seminar, real parachute jumping will be part of the course. Participants will jump connected to an experienced jumper in tandem style. And even Nick Peters has not ruled himself out.

Christian Geyer

(Die Welt, Bonn, 4 August 1987)



No slip ups, please. (Photo: ...)

Veteran experts take skills to the world

Not many people have heard of Wuhan. Even fewer have heard of Werner Gerich, who comes from near Karlsruhe. There is a connection between the two.

Wuhan is a Chinese city with four million people about 300 miles west of Shanghai which is a heavy industry centre. Gerich is a 67-year-old engineer, is an honorary citizen of the city. He is also general director of a diesel-motor works there.

His honorary citizenship is in recognition not only of the man himself, but for the whole idea of the Senior Experten Service (SES), an organisation which uses retired Germans with usable skills to pass on their knowhow in Third World countries.

It has its headquarters in Bonn. It offers specialists from industry, commerce and administration. Pensioners who aren't content messing around in their back gardens, who are also fit and enterprising, are sent to many parts of the world by SES.

They are flown to where they are going, are get free board and lodgings and a small amount of pocket money.

Werner Gerich did not set out to be a general director of anything. He found himself simply sitting in the spartan boss' room, where he had been sent on the decision of some party chief, and simply steered the works out of industrial chaos and into the black.

Such spectacular success are not that common, but SES successes are becoming known everywhere. The service was started in West Germany in 1983. It followed the pioneers, the French and the Americans. It uses several hundred experts who are first of all highly qualified craftsmen and engineers to boost mainly middle-sized industrial firms or organise government administrations.

There are plenty of applicants — more than 1,800 men and women are registered. There are no special qualifications apart from the specialist qualifications. Applicants must be healthy and able to adapt. Age plays little importance.





Werner Gerich at work. (Photo: Private)

SES manager Heinrich Nordsieck says: "With us, everyone is as young or old as he or she feels." Language knowledge is naturally an advantage, but is only of secondary importance.

The nature of the tasks is varied: treating meat in Brazil; glass blowing in Jamaica; textile making in Colombia; setting up a printing works in Lesotho.

Especially popular are German adviser in various countries who help set up breweries. One has been set up in Western Samoa.

In four years, SES has spread its activities to 60 countries. Most of the operations are in Africa but there is more involvement in China than in any other single country.

And in Wuhan, Herr Gerich is not alone. SES people have formed a minor German colony there.

On average, SES people spend two months on a project. Sometimes it is only two or three weeks. But it also could be six months or more. The service gladly uses married couples.

The Bärenfängers worked for half a year in Sierra Leone. Frau Bärenfänger arranged the administration of the local hospital while her husband busied himself with the construction of a new hospital building.

The supply of workers is greater than the demand and so many applicants complain about the long waiting time.

Nordsieck says that sooner or later everyone gets a chance." He qualified the point: "Anyway, the odds are greater than in the lottery."

It depends a lot on trade: a master butcher had an excellent chance of getting to Africa and demonstrating the skills of making sausage.

Jürgen Tuchel

(Nürnberger Nachrichten, 18 July 1987)

■ SOCIETY

100,000 down and out in Munich, says report

Mannheimer MORGEN

More than 100,000 people in Munich are living on the breadline, says a study commissioned by the city.

The study, New Poor in Munich, says 83,471 (6.5 per cent of the city's population of 1.3 million) live in poverty below the breadline. To them should be added 16,000 of the 40,000 unemployed who don't qualify for benefits plus foreigners with restricted residential permits.

The survey was carried out by Rolf Romanus' research institute, which has researched various issues already for the city such as Munich's homeless, runaway young people and traffic planning. Romanus claims that "new poverty" in Germany has never before been looked at so extensively.

The category deals with people on supplementary benefit and unemployed in general.

The Munich study indicates causes, the structure and tendencies of this new poverty and draws vital social consequences.

It is estimated that there are about 50,000 eligible for supplementary benefit, including estimates of unrecorded cases. The figure has increased over the past five years by 22 per cent. The gross expenditure increased by DM71m.

The traditional preponderance of woman has disappeared. Men now dominate.

In addition the age of people receiving supplementary benefit has dropped. The proportion below the age of 65 has increased from 20 to 30 per cent.

The social researchers discovered that the cause of this was that the basic social system, of prime importance for the maintenance of minimum standards of living, was getting more and more inadequate.

In the future it can be assumed there will be a further increase in the number relying on supplementary benefit, since the proportion of the "problem group" of long-term unemployed is increasing.

There are also indications that adolescents and young adults are increasingly in need of supplementary benefits, people who being prepared for a career with "the poor elderly."

The writers said that supplementary benefit only dealt with "controlled poverty."

They took into account the "poverty potential" of the clients of the Allgemeiner Sozialdienst (ASD) and the recipients of rent rebates, about 13,000 to 14,000 in each case.

According to ASD staff the number of people on the poverty line has increased by 90 per cent over the past two to three years in the city districts where they work.

The greatest growth is among single parent families (that account for 18 per cent of all the people in their care) and families with children (22 per cent).

Old people only account for 16 per cent of the people cared for by ASD.

The social workers say the main cause for this new poverty is the unemployment of one or more members of a family, often related to inadequate unemployment benefits and cutbacks in social assistance.

Against this there are rising expenditures for increasing or high rents and debts that are incurred in an attempt to solve problems.

The third group among those likely to fall into poverty is a peculiarity of Munich, the same problem that other cities affected by the steel crisis have.

Munich has the highest rents in the country, with 4.1 per cent of all households supported by rent rebates. Two-thirds of the 31,576 receiving rent rebates live below the poverty line.

After discounting people receiving supplementary benefit there is still a hard core of 13,966 people who are below the "absolute minimum."

Other features will contribute to increased poverty in Munich despite all its glitter.

Among them are the attraction the city has for people seeking work and the "freedom" characteristic of Munich life, increasing the competition among job-seekers. This is creating a catastrophic situation for living accommodition for people with relatively low wages.

Living costs are often more expensive than elsewhere. There have been cutbacks in new council house building and there has been an increase in expensive accommodation through modernisation and the change to home-ownership, which adds to the difficulties.

Karl Stankiewitz

(Mannheimer Morgen, 9 July 1987)

Couple cuts off mains power in anti-nuclear protest

Kirsten and Volker Jeck don't use municipal electricity any more. They told the supplier to get lost as a protest against nuclear-power production.

Their home looks just like any other in one of the endless housing blocks in the working-class suburb of Barmbek.

But there are burnt-out candles everywhere and sootblackened spirit lamps dangle in each room instead of light bulbs. The electricity meter in the cellar hasn't been working for more than a year.

Kirsten is a nurse in an old people's home and Volker is a teacher. He says their home is not an example of the "alternative way of life." Their stand is purely a protest against nuclear energy.

There is even a new but unused shower the landlord had installed: the Jecks heat water with a propane gas heater, which looks a bit lost on top of the sparkling electric cooker.

Volker offered me coffee and explained quietly that for years he has been politically involved in various movements. Chernobyl triggered off in him the need to make a personal protest against nuclear energy.

In the corner of the room there was a small car radio. It is driven by car battery. "Yes," he admitted, "that is a small compromise that I have had to make."

He added: "I don't regard myself as an ecological superman. My campaign is not against electricity as such. It is far more against the irresponsible way it is produced."

So he is boycotting the Hamburger Electricitäts-Werke (HEW).

Some time ago his evenings without electric light began to get on his nerves, particularly as he had to do a lot of reading for his examinations.

After the first months without electricity he began to use a car battery as his alternative source of power.

He has two car batteries. One is installed in his Renault 4 and is recharged as he drives about. The other is in his apartment to provide light for reading. The batteries are changed over every two weeks.

He said: "My campaign is directed against one thing, nuclear energy."

Despite the return to "civilisation's abundance," to use Jeck's words, through the trick with the battery, there are still limitations.

Who wants to get through a summer without a fridge? Who wants to do without a record-player, a vacuum cleaner, hair-dryer or any number of other items that are taken as a matter of course?

Jeck admits that it is hard to be without a stereo. Not having a refrigerator makes shopping difficult.

But on the whole there have not been any insurmountable problems.

What do his neighbours and relatives say about it all? Opinions are divided. Many are in favour and admire the Jecks' consistency.

Other criticise doing without municipal electricity supplies as "turning away from the general consensus of attitude."

His friends endlessly discussed the matter. But the discussions have petered out. Volker Jeck said: "They now know where the candles are kept."

HEW's first action was to issue an official reminder. Jeck wrote a letter of protest.

He suggested that HEW should check the meter to see that not a kilowatt hour of electricity had been used in the previous year. He has heard nothing since.

The lessons to be learned from the campaign are complex. The Jecks feel good that they have been able to carry on independently of the official electrical supply network.

They have felt themselves enriched for without electronic entertainment they have been able to turn to other, forgotten, forms of leisure activity.

Games and conversation, for example, have again taken on importance.

The most important thing that has been learned from the boycott, however, is just how important electricity is.

Volker said: "You take a very different view when you have to hump a battery into the apartment for electricity," referring to the change of battery every two weeks.

Have there been any imitators of the Jecks' campaign? They were disappointed that none of their friends and acquaintances from peace groups have taken up their example.

They are, as HEW said, unique.

Albrecht Aichelin

(Deutsches Allgemeines Sonntagsblatt, Hamburg, 2 August 1987)

Pros and cons of marriage behind bars

STUTTGARTER NACHRICHTEN

There are particular difficulties for people who marry with one of the partners either in prison or remand prison.

A study has tried to investigate how those concerned handle the situation, how they arrange a marriage behind bars and what chances of such marriages lasting.

Fairly different motives were found between the sexes that led them to make such marriages.

Men enter into them mainly because they promise advantages in the penal system. Women who are not in jail marry a man who is mainly to "save" him. The most usual reason they give is that they want to care for and help the man.

Professor Reinhard Wille, head of Kiel University's sexual research institute, has examined 34 of the approximartely 80 marriages concluded between 1972 and 1980 in Schleswig-Holstein between partners one of whom was in a penal institution at the time of the marriage.

In two-thirds of the cases the partners knew each other before one of them was imprisoned. In a few cases an "intimate relationship" of one kind or another already existed between them.

Of the remaining eleven couples six got to know each other in prison itself.

Only three of these couples were met during parole, a possibility introduced in the Federal Republic in 1977. For the majority of the others the relationship was built up by letters and visits, and they married within a year of the first contact.

As the *Medical Tribune* reported it shows that the strengthening and maintenance of such a relationship, particularly when one of the partners has a long sentence to serve or life, is very difficult, particularly as parole generally in such cases is refused.

Granting leave of absence, apart from discharge from prison of course, is the only opportunity of having marital sex.

Officially sex between married couples in prison is forbidden in the Federal Republic. According to Wille, it is only rarely tolerated unofficially.

Nevertheless 90 per cent of the men questioned and 70 per cent of the women stated that they were satisfied with this aspect of their married life.

Wille found that there was disappointment about the therapeutic effects of marriages in prison.

Seventy per cent of the men relapsed after their release from prison. Of the five women who were married in prison two relapsed.

This is not surprising in view of the difficulties such marriages have to deal with.

It appears that the 15 couples whose marriage had not lasted longer than a year, still described the relationship as being intact.

Almost just as many, 14, were described by the husbands and wives as having failed and five believed their marriages to be endangered.

Renate I. Mreschar

(Stuttgarter Nachrichten, 25 July 1987)

■ WORLD AFFAIRS

Central America agrees to take its destiny in its own hands

The Central American heads of state have signed a peace plan in Guatemala City. The Nicaraguan government will be bound under the deal to liberalise its regime and hold free elections. But the Nicaraguans say that the deal depends on America ending aid to the contras.

Before the summit in Guatemala City, hopes were not high that an agreement would be reached. Both diplomats and foreign correspondents were pessimistic that anything concrete would be decided.

So the news that the presidents of El Salvador, Guatemala, Honduras and Nicaragua had agreed to the plan presented by Costa Rica's Oscar Arias came as a surprise.

The formal signing ceremony showed that regional leaders had decided to take their destinies into their own hands and no longer allow solutions against their own interests to be imposed upon them.

Guatemalan host Vinicio Cerezo Arevalo could hardly have put the point more clearly than in his final address. "We want to be the leading actors in our own history," he said. Nicaraguan leader Daniel Ortega later made a similar point.

Such comments testify to more than self-assurance. They are also a rejection of attempts by the superpowers to transform a restless region into a stage for their rivalries.

His initial reaction made it clear that President Reagan does not like the peace plan.

In his speech on the Irangate scandal he reaffirmed the well-known viewpoint that his administration would continue to do all it could to prevent the establishment of a Soviet bridgehead in Central America.

The Reagan administration does not seem prepared to see the world's hotspots, be they the Middle East or civil wars in America's "back yard," other than in terms of the East-West conflict.

Mr Reagan is convinced that all evil in the region can be traced via Nicaragua to its Cuban backers who, in their turn, are mere Soviet puppets.

So his aim has been to isolate Nicaragua and show the Sandinists with their Marxist terminology to be an alien body in America.

The Arias Plan thwarts President Reagan's concept. The five Central American leaders who met in Guatemala agreed to set aside ideology and make a pragmatic attempt to solve the conflict.

The Arias Plan forces two countries in particular to nail their colours to the mast sooner or later. They are the United States and Nicaragua.

President Reagan was understandably unenthusiastic about having a fait accompli foisted on him by the five Presidents from America's back yard.

Yet even though he clearly dislikes the plan he cannot simply ignore it. To begin with, there is a sound foreign policy argument for taking it seriously.

If the US government rode roughshod over regional views, it would be in trouble with the Contadora states of Colombia, Mexico, Panama and Venezuela, all of which endorse the Guatemala Agreement and are envisaged as playing a leading role in putting it into effect.

NÜRNBERGER Nachrichten

What is more, Cerezo Arevalo's proud slogan "We want to be the leading actors in our own history" has been understood throughout Latin America.

Heads of state of the subcontinent are prepared a summit conference at which this idea is likely to be taken up, with special reference to the debt crisis with which the South is saddled.

Sovereign debts paralyse economic development and pose a greater threat to democracy than Marxist guerrillas. To reject the Arias Plan outright would be to snub Latin America, and that President Reagan cannot afford to do.

The second reason is domestic in character. It is a matter of relations between the President and Congress after Irangate. Aid to the anti-Sandinist rebels as approved by the US Congress expires at the end of September.

At the moment there are no signs that President Reagan can expect to enlist majority support for an application to approve further aid. It is hardly the right time for moves of this kind.

In October the commission of enquiry will be publishing its findings on Irangate. They are unlikely to create an atmosphere favourable to aid for the Contras.

Nicaragua will have to make it clear where it stands too. President Ortega clearly understood that the Arias Plan might well be the Sandinists' last opportunity of extricating themselves without loss of face from the cul-de-sac into which they have manoeuvred themselves.

The agreement can be presented as an initiative drawn up by the region itself and thus as a proposal more in keeping with the interests of local people than solutions thought up in Washington or elsewhere.

Now is the time to see whether the Nicaraguan regime is capable of conducting a dialogue with the Opposition, whether it can bear contradiction and criticism and whether dogmatic Marxist views or a pragmatic outlook will prevail.

Along with his colleagues President Ortega undertook verifiable commitments, such as the restoration of civil rights and Press freedom, lifting of the state of emergency and the release of political prisoners.

These are the touchstones that will show the Sandinists' mettle. They will soon show whether they see the Arias Plan as no more than a means of surviving the last 17 months of the Reagan administration or are prepared to play a serious part in the peace process.

President Arias may take a sceptical view of the outlook for a democratisation of Nicaragua, but he does say the Sandinists show signs of a "new desire for peace."

War and militarisation will not solve the region's real problems, which are poverty, malnutrition, social injustice and a lack of education and of democratic structures.

This is a point that has been forgotten of late. One American capital where it has been forgotten is Washington, where the Kissinger Commission made the point clearly enough. The Arias Plan is an opportunity to reconsider.

Wolfgang Schultheiß

(Nürnberger Nachrichten, 15 August 1987)

Continued from page 1

The UN and the Gulf war

Basic Law in connection with the Persian Gulf.

As in earlier crises in the Middle East and environs, the Bonn government hopes to gain time by referring to constitutional constraints.

As a diversionary move it has embarked on a spate of activity at the United Nations in New York where, as luck would have it, the Federal Republic is not only a member of the Security Council again but has, since July, chaired it.

Foreign Minister Hans-Dietrich Genscher has made use of this instrument in his usual bustling manner.

Bonn has been able to convey the impression that it helped pave the way for UN Security Council Resolution No. 598 calling, in rare unanimity, on Iran and Iraq to cease hostilities.

This has better enabled it to withstand US pressure to make a military contribution toward coping with the Gulf crisis.

Bonn's diversionary strategy has, in particular, included the argument that someone must maintain a bridge to the internationally outlawed regime of Ayatollah Khomeini.

The Federal Republic — or so this argument goes — has undertaken a difficult international assignment in upholding Iran's interests for the sake of a peace settlement.

This somewhat exaggeratedly disinterested pose proved a double-edged strategy.

Washington was as well aware as London or Paris that Bonn was keen to look after substantial commercial interests it still retained in Iran.

Besides, this pro-Iranian approach was bound to lead to the clash with Iraq that promptly came to the fore when Herr Genscher publicly stated that it had started the Gulf War.

At high speed the German Foreign Minister had to rush to Paris to pacify his Iraqi opposite number, since when he has been felt to have outbid this particular hand. Herr Genscher certainly now seldom mentions Iran or Iraq.

Bonn's role at the UN has begun to show signs of wear and tear too, and now Britain and France have decided to reinforce their naval units in the Gulf with minesweepers the Federal Republic has come under heavier pressure to make a military contribution too.

Bonn is unlikely for long to be able to withstand this pressure, especially as the Federal government has constantly stressed how well it understands the US desire to share the burden.

Pressure might only be eased if the situation in the Gulf takes a turn for the better soon. But there are no signs of imminent improvement. So Bonn is unlikely to be able to avoid having to show the flag.

After the symbolic moves undertaken by Britain and France, the Federal Republic is less likely than ever to summon the courage to remind the Reagan administration how problematic muscle-flexing in the Gulf is.

Bonn is currently considering whether Bundesmarine ships might be seconded for a while from their normal duties and sent to reinforce the US fleet in the Mediterranean or to patrol the North Atlantic.

That is probably what will happen, as a pacifier to President Reagan, even though the military value of any such move is virtually zero.

But the Federal government could then at least say it had shown itself once more to be a reliable US ally and not refused to demonstrate solidarity when called upon to do so.

Bonn government officials may well count themselves lucky to get off so lightly now the Dutch and Italians have decided to make a gesture to the White House too.

Italy has proposed setting up a multinational minesweeping fleet for the Gulf under the auspices of the Western European Union (WEU).

There can be no denying the risk that Bonn's present policy, aimed at playing for time and diversionary tactics rather than at marshalling arguments against US policy in the Gulf, cannot be upheld for much longer.

If the Gulf crisis continues and is, say, heightened, the Federal government may find itself paying a higher price than it had imagined in return for the constitutional constraints that rule out a direct German role in the region.

The policy of muddling through while taking care not to criticise the Americans could rebound on Bonn.

Another feature of this policy has been that the West has engaged in virtually no consultations in connection with this difficult display of muscle-flexing in the Persian Gulf.

It is not just that President Reagan does only what he and his advisers consider right, often paying greater heed to the domestic ramifications of Irangate than to the Gulf itself.

The Europeans have also failed to agree on a joint approach. Nato, says Bonn, is not responsible. Neither is the European Community.

The latest move is an attempt to awaken the WEU from its Sleeping Beauty slumber.

If anyone were to make an ill-considered move with serious consequences in the Gulf, then America and its allies could only be said to have carelessly stumbled into the predicament.

Jürgen Kramer

(Deutsches Allgemeines Sonntagsblatt, Hamburg, 23 August 1987)

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■ HOME AFFAIRS

The turbulent life and times of Franz Josef Strauss

Come all ye faithful ... Strauss at party congress. (Photo: Sven Simon)

The dispute between the CDU and CSU over whether the Bonn government should offer political asylum to 14 jailed Chileans who could face execution has again shown that Bavarian Premier and CSU chairman Franz Josef Strauss has his own style when it comes to stirring up public emotions and hitting out at political opponents.

In contrast to Helmut Kohl, who never misses an opportunity to emphasise that he is one of the political "grandchildren" of the Federal Republic's first chancellor, Konrad Adenauer (CDU), Strauss rarely uses Adenauer's name to boost his own personal image.

He has always regarded himself as too much of a leading light in his own right as to need to shine in the aura of his political mentor.

The fact that the *Bayernkurier*, the party organ of the CSU, now describes Strauss as the "only companion of Konrad Adenauer who is still politically active" indicates that the current conflict between his party and the CDU cannot be dismissed as the usual tactical theatre of a Bundestag summer recess.

This attempt by Strauss to present himself as the only real custodian of Adenauer's political legacy can only be interpreted as genuine concern about the future of Adenauer-style conservativism in today's CDU and CSU.

Strauss must share the blame for being frequently misinterpreted as a misunderstood genius of German politics.

As in the latest exchange of blows with Bonn Labour Minister, Norbert Blüm, and CDU business manager, Heiner Geissler, Strauss generally begins by publicly letting off steam through apparently superficial and emotional attacks on his opponents. He follows with more detailed interviews and explanations which are usually submerged in superficial media treatment.

The result is that Strauss becomes embittered about what is said about him. In the row over Chile, for example, he has been accused among other things of defending dictatorship, torture, exploitation, and violations of human rights.

His concern about the future of what he has built up in over 40 years of postwar German politics is by no means unjustified.

Above all, two decisive misjudgements by the CSU chairman himself stand to jeopardise what Strauss regards as his lifework and the legacy of the founder fathers of the CDU and CSU.

The first is his anti-communism and the associated missionary belief that his task is to save the Christian West from the Bolshevist domination of the world. The second is his extreme fear of disloyalty and conspiracy.

Strauss has never been too keen on defining exactly what Christian means in the field of politics, generally opting for non-committal and vague statements.

Nevertheless, it is fair to claim that he supports the extensive integration and solidarity of all forces whose common *Weltanschauung* is the rejection of communism.

Strauss was and is deeply convinced that, irrespective of all tactical or forced changes in the Eastern bloc, the ideological commitment of communism to world revolution and the underlying Russian imperialism still exist.

His unshakeable belief that communism is the greatest of all evils led to the decisive flaw in his line of reasoning, namely that all lesser evils can be tolerated providing they help prevent or combat the greater evil.

This view of politics meant that Strauss repeatedly overlooked actual Christian (and democratic) principles in the broader contexts of his geopolitical concept.

In order to save the Christian West from the Antichrist he believed that Christian principles could be dispensed with in certain situations.

In order to safeguard western democracies and "the free world" (which Strauss equates with the non-communist world) against communist totalitarianism he believed that democratic principles could be temporarily neglected.

It would be wrong to claim that Franz Josef Strauss supports the undemocratic exertion of power, political persecution and torture, racism and social injustice.

However, for the "geopolitical strategist" Strauss the internal situation in Greece during military rule, in the Turkish military dictatorship, in the anachronistic Portuguese colonial empire under Salazar, and in the tyranny of the white racists in South Africa is just as much a secondary concern as the military regimes of the Central and South American oligarchies.

His primary concern at all times was the unquestioning safeguarding of a western-oriented bulwark against communism.

The motto put out by Strauss today is that, as long as the geopolitical bulwark — stretching from Chile via the Philippines to South Korea — is strong, efforts to persuade these countries (and allies) to gradually reduce internal hardships and return to a democratic system would stand a better chance of success. What Strauss failed or was unwilling to appreciate was that the longer and more brutally a dictatorship rules, and the less Christian and western-democratic forces contribute towards its overthrow, the more likely that country is to fall prey to communism. Strauss, however, became more and more set on his role as the saviour of the Christian West, all the more so as no Bonn government since the one led by Kurt Georg Kiesinger (CDU) has advocated this stance.



I don't like that new Bond any more than the old one.
(Cartoon: Horst Haitzinger/Nordwest Zeitung)

Strauss feels that certain sections of the SPD at least are susceptible to communist feints.

In his opinion the FDP is disunited, naive, opportunistic and mainly interested in how to survive.

In his search for anti-communist solidarity Strauss discarded any inhibitions he may have had to woo and as far as possible absorb right-wing electoral potential in the Federal Republic of Germany.

Admittedly, in his representation of German interests he has never lost sight of realities and never acted as irresponsibly as suggested in many a pre-election speech.

As a result, some right-wing extremists felt fooled and taken for a ride by the election promises made by Strauss.

Strauss is aware of this, which explains his fears that a political party with parliamentary representation to the right of the CSU might soak up the votes of disappointed nationalists.

DEUTSCHES ALLGEMEINES SONNTAGSBLATT

Despite occasional shifts of emphasis by the CDU and CSU Strauss is convinced that the most important political task of both parties since the days of Adenauer has been the integration of the democratic right wing, i.e. the pooling of Christian, conservative and other anti-communist forces to counterbalance socialism.

The CSU chairman is now worried that tactical manoeuvres by those in the CDU who sense potential voters among politically disoriented right-wing social democrats or confused trade unionists might jeopardise this fundamental consensus.

On the one hand, Strauss fears that a reorientation of the CDU towards the centre-left would debilitate and gradually break up the right-wing electoral bloc and foster the emergence of a new and more extreme right-wing party.

On the other hand, he is worried that a move towards this position by the CDU could leave the CSU as the party of the right-wing fringe.

This would isolate Strauss and put the CSU in a right-wing corner without the party being able to capitalise on this fact outside of Bavaria. In addition, Strauss is apparently becoming more and more aware of the internal weakness of the CSU.

Like many exceptional figures with a definite nose for power Strauss, who never quite made it to the top, has done everything during the past few decades to make sure that political personalities who are all too powerful have not been able to challenge his leadership.

What is more, he has always regarded opportunistic sycophants and fawners as his friends.

Vice versa he has immediately mistrusted all those friends who have tried to criticise him or moderate his emotional outbursts, accusing them of a lack of loyalty or party-political careerism.

Strauss can find no trace of politicians with the power and intellectual abilities needed to continue his lifework when he retires from politics.

This applies to both the group of elderly politicians in the Bavarian state parliament as well as to the zealous party paladins who have tried to earn the unconditional trust of their leader by abstaining from independent political thinking and via blind obedience.

Due to the aura of his own personality there is a definite risk that the a Strauss-less CSU could degenerate into a provincial Bavarian party with a considerably weakened ability to assert its position vis-a-vis the CDU.

Strauss may not like the way in which the FDP is already emphasising that his days in active politics are numbered.

He also knows, however, that the CDU is also eagerly counting how many days are left too, albeit not so loudly.

Hannes Burger

(Deutsches Allgemeines Sonntagsblatt, Hamburg, 23 August 1987)

■ THE LAW

German expert consulted as Soviet Union thinks about changes to penal code

Martin Fincke, professor of criminal, criminal procedure and East Bloc law at the University of Passau, in Bavaria, is spending five months in the Soviet Union as part of an exchange programme financed by the German Research Society. He is examining the changes in Soviet criminal law triggered by *perestroika* (reconstruction) and *glasnost* (openness). In this article for Rheinischer Merkur/Christ und Welt, Hans-Joachim Deckert looks at these planned law changes and the work of Professor Fincke.

Lawyers at the famous Institute of State Affairs and Law in Moscow are hoping to take a major step towards humanising Soviet criminal law.

There are plans to introduce a legal stipulation on diminished responsibility. At present a defendant is either regarded as not responsible for his actions or fully responsible, regardless of the circumstances.

Lawyers feel that this is both inhuman and unrealistic.

The representative of the Serbski Institute of Psychiatry, however, whom the law institute had invited as an advisory expert, declared that his branch of science was not in a position to decide whether responsibility in terms of criminal law was permanently or temporarily diminished.

The Serbski Institute, which is responsible for sending many dissidents to psychiatric clinics, is not always so hesitant.

One of the lawyers came up with the idea of asking Professor Martin Fincke from the University of Passau for his opinion and a description of the situation in the Federal Republic.

Professor Fincke is spending five months in the Soviet Union as part of an exchange programme financed by the German Research Society. This is his eighth visit.

He has known some of the members of the criminal law committee in the Moscow Institute for many years and is a welcome guest at their meetings.

Taking up the suggestion Fincke pointed out that a legal stipulation on diminished responsiblity has existed in Germany since the beginning of the century.

Professor Fincke feels that this legal institution is absolutely essential.

His views on this subject made the legal experts in Moscow sit up and listen, but any legal reform will be difficult to push through against the opposition of politicians.

If it is to be accepted at all, a tactical concession will have to be made: the influence of alcohol must not be considered a mitigating circumstance.

Soviet leader Mikhail Gorbachov, himself a lawyer and preacher of moderation, is not willing to tolerate a compromise on this.

This discussion typifies the situation. Moscow's astute jurists are doing all they can to move criminal law away from the system of people's justice which replaced major elements of western legal concepts during the 1920s.

A typical example of the changes the legal system has undergone since the early phase of Bolshevism is the abolition of the ability to appeal.

The idea was that the consolidation of people's justice was more important and that this should not be altered by professional judges in an appellate court.

Today, the "professionalisation" of the judiciary is again on the agenda.

A return to a genuine possibility of appeal could be one of the results of this process, although this aspect is not apparently regarded as urgent.

At present the only means of quashing a verdict in the Soviet Union is via cassation, i.e. reversing the final verdict after it has been passed.

Up until a few years ago this meant that a person convicted of an offence could never be certain that he would not be given an even stiffer sentence at a later date.

Today, an alteration of a verdict to the detriment of the person accused must be effected within a year.

Efforts to check Stalinist evils in the legal field already began under Khrushchev.

The existing criminal law system came into force in 1977.

However, as criminal law expert Tshiil Sheynin explained in a description of the Soviet legal system, the "laws are being constantly perfected in the fight against crime".

Fundamentally stable, he added, the system has been renewed and supplemented in order to "correspond to the new demands of a forward-looking society".

There is no need, Sheynin wrote in 1981, for radical changes.

The scientific community at least does not share this opinion today.

The jurists in Moscow, who have already been working on a reform concept for two years, were encouraged in

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their efforts by an unexpected Politburo decision in January. By the end of the summer holidays, they were told, draft amendments are to be elaborated for both the criminal code and the code of criminal procedure.

Jurists were even more enthusiastic in view of the fact that the political leaders refrained from specifying any content-related conditions for their work.

On the other hand, it is clear that the intention is a new codification rather than a mere updating. *Perestroika* is also planned for the legal system.

Gorbachov's principle of "new thinking" has to contrast with the first phase of liberalisation. The operative word is humanisation.

There is general agreement that a further move away from the tradition of draconian punishment is needed.

Reformers are hoping for a "decriminalisation" in major areas of life.

If they have their way, for example, failure to report a criminal offence will no longer be a punishable offence.

And if a criminal offender is hidden away by his wife this should no longer be punishable (aiding and abetting dependants).

In the field of criminal law relating to young offenders there are plans to reduce the number of offences and restrict criminal prosecution to serious cases only for offenders aged between fourteen and sixteen.

However, despite substantial progress the death penalty will be retained.

If legal experts manage to push through their views against the party and the KGB the death penalty will only be imposed for treason and homicide.

Execution on the grounds of corruption or other business crimes such as currency smuggling, a form of punishment practised up until very recently, is to be made impossible in future.

There are also plans to ensure that women and men over sixty do not have to face the firing squad.

Barbaric

Any process of humanisation should also include the prison system, which has a particularly barbaric reputation.

However, a new law in this field is not planned.

There is every indication that serving a prison sentence in the Soviet union is at least twice as hard as doing time in the more modern prisons in the West.

Serving a ten-year maximum penalty in a Soviet prison or a forced labour camp really does mean the end of the road for those convicted.

Any move towards a more humane prison system, assuming that a political will to do so exists, would probably founder due to financing problems.

There are more urgent investments in Gorbachov's programme.

What is more, the attitude of the Soviet people in general towards criminals is far from being humane.

Admittedly, a number of envisaged alterations in the criminal code also affect the prison system.

The jurists would like to see a limitation of the number of cases in which imprisonment is considered.

Prisons, "colonies" and "colony-camps" are to be considered in serious cases only.

According to some legal experts, banishment — a form of punishment with a deeply-rooted tradition — should be abolished altogether.

The new form of punishment envisaged in the programme is called "restriction of freedom".

In practice this would mean a compulsory contract of employment.

The firm employing the person in question would then assume responsibility for that person's "reformation".

Firms already have the task of "educating" employees with suspended prison sentences, an idea which is totally unacceptable to western legal and social concepts.

Nonetheless, Professor Fincke feels that considerable progress has been made.

This explains why he is all the more disappointed at the fact that the attempt to introduce greater legal certainty via the reform must be regarded as having failed.

In his opinion, the political leaders in the Soviet Union have failed to heed the

Continued on page 8

■ PERSPECTIVE

Death of Hess, Hitler's most obedient servant

Rudolf Hess, who was sentenced to life imprisonment at the Nuremberg war-crimes trials in 1945, has died in Berlin aged 93. Hans Werner Kettenbach looks at the Hess years for *Kölner Stadt-Anzeiger*.

The late Rudolf Hess' greatest claim to fame was his 2,000-kilometre flight from wartime Germany to Britain on 10 May 1941 when he outmanoeuvred both air-defence systems.

Hess, 47, was Reich Minister and the Führer's deputy. His aim was to talk with the Duke of Hamilton, an influential RAF officer, and submit a peace plan.

"He was successful, but no one can say with certainty if the mission was Hesse's own idea or whether it was on Hitler's orders.

Hitler issued an official statement saying his deputy was mentally deranged ("The entire manner of his behaviour confirms the fact that he had been suffering from delusions").

Yet a peace treaty with Britain would have suited Hitler's strategic purpose fine. Ten days earlier he had decided to invade the Soviet Union on 22 June.

That meant waging a risky war on two fronts for as long as there was no outcome in the West.

There have been doubts expressed both about the motive and the identity of the man who made the parachute jump over Dungavel, the Duke of Hamilton's country estate.

Hugh Thomas, a British military doctor who examined "Prisoner No. 7" at Spandau in 1973, found no traces of the bullet that penetrated Hess's lung in 1917.

Thomas put further facts together in support of a fantastic theory. His idea was that Himmler, the SS leader, planned to oust Hitler.

He had thus eliminated Hess and sent a double of the Führer's deputy to Scotland to cover up the fact. But there is too much evidence against this theory.

The British government failed to take the deserter, with his arrogant demands, seriously.

During interrogation, Hess said: "The Führer can, understandably, not be expected to negotiate with Mr Churchill. You would have to elect another Prime Minister who is acceptable to the Führer."

Hess was imprisoned, given psychiatric treatment and tried by the Allies at the first Nuremberg tribunal in 1945.

He was the only one of 22 Nazi leaders tried at Nuremberg to be found innocent of charges of war crimes or crimes against humanity.

But he was sentenced to life imprisonment for conspiracy and crimes against peace.

Was his sentence unfair? Was he an idealist who meant well but fell foul of the victors' revenge?

Or was a sick man sentenced, a man who was neither legally nor morally to blame for the offences of which he was accused?

Hess's life story would seem to indicate that an entirely different conclusion is warranted. He was a typical, by no means unusual representative of the clique that triggered the worst war ever waged and had millions of deaths on its conscience.

Hess was born on 25 April 1894 in Alexandria, Egypt, where his father was a self-employed businessman.

His father was a typical German of his day: strict, hard-working and had a strong sense of honour. At home, his son later said, he struck terror into his family's heart.

In 1908 Rudolf was sent to a Protestant boarding school in Bad Godesberg. He was not allowed to study mathematics and science, as his teachers advised; his father insisted on him learning a commercial trade. He returned to Alexandria and went into his father's business.

When war broke out in 1914 he rebelled against his father for the first time, telling him it was no longer for businessmen to issue orders; now was the time for soldiers.

He volunteered for service with the 7th Bavarian Field Artillery Regiment. He was wounded three times, once at Verdun. Near the end of the war, he was commissioned and trained as a pilot.

After the war, he went to Munich where in 1919, he enrolled as a student of economics at Munich University and studied under Karl Haushofer, a former general who taught geopolitics.

But his main activity was procuring arms and ammunition for nationalist terror groups. He led sabotage groups and joined the Epp Freikorps.

In May 1920 he met Hitler at a meeting of similarly confused characters in the back room of a Munich bar. Hess became the staunchest henchman of the emerging Führer.

Lieutenant Hess agreed with Private Hitler that Germany's defeat and the emergence of the Weimar Republic were national disgraces that must be avenged. Hess asked: "I fought for the honour of the German flag. Is it all to be in vain?"

As commander of a student corps he took part in Hitler's November 1923 putsch, storming the Bürgerbräukeller and the Rathaus and taking hostages.

When the putsch failed he fled to Austria but returned on learning that Hitler had been sentenced to prison. He was tried, sentenced and served his prison sentence alongside Hitler in Landsberg jail.

Hitler dictated his "Mein Kampf" to Hess while they were in jail. Hess was more than a secretary; he also contributed ideas of his own.

The idea of "Lebensraum," or living space, needed by the German people in the East, where they would have to conquer the inferior races who now lived there, is closely related to the geopolitics taught by Hess's university teacher Haushofer.

Otto Strasser, one of Hitler's earliest associates, had this to say about the Landsberg duo:

"Hess is entirely devoted to him. Hitler need have no fear of Hess objecting to any of the historical inaccuracies of which he is guilty, let alone the least criticism of the exaggerated monologues to which Hitler is prone."

Joseph Goebbels, later Reich Propaganda Minister, wrote in 1926 about Hitler and his closest associates:

"Hess: the most decent, quiet, friendly, shrewd, his private secretary."

In December 1933 Hess was rewarded, being appointed to the government. The "Law to Ensure the Unity of Party and State" declared the Führer's Deputy (and the SA's chief of staff, Ernst Röhm) to be members of the Reich government.

Röhm, whose paramilitary forces threatened to get out of the Führer's control (and whose homosexuality was greatly resented), did not survive for long.

The Führer in person led the raid that ended with Röhm's execution and was described by Alfred Rosenberg, the chief ideologist of the Nazi Party, as follows:

"Come on in," Röhm said to the orderly (or so he imagined), "the door is open." But Hitler smashed the door open, lunged at Röhm, who was lying in bed, grabbed him by the throat and yelled: "You are under arrest, you swine!"

Unlike Röhm, Hess never for a moment gave the least ground for suspicion that his views on National Socialism might differ one iota from those of the Führer.

In the late 1920s he said: "I want to be the Party's Hagen."

Yet despite his senior position he never emerged as a commanding figure. "Decent, but sick and indecisive" was Rosenberg's 1939 judgement.

The Führer nonetheless knew Hess's worth. On 25 June 1934 Hess had this to say in a radio speech:

"One person is invariably exempt from criticism of whatever kind, and he



The Führer was always right . . . Rudolf Hess. (Photo: dpa)

is the Führer. That is because everyone feels and knows he was always right and always will be right."

That same year Hess told political leaders and commanders of the Hitler Youth and the Reichsarbeitsdienst:

"The more you obey orders right down to the smallest detail, turning right or left as the Führer commands, the more automatically you march in step, the more readily the Führer can lay the groundwork for putting the National Socialist programme into practice."

On 1 September 1939 Hitler told the Reichstag that German troops were now returning Polish fire:

"I have now redonned the uniform that was always my most prized and sacrosanct possession. I shall not take it off again until we win — or I shall die before we do so!"

If anything were to happen to him he appointed Reich Marshal Göring his successor, to be followed by his former private secretary, Rudolf Hess.

Was Hess a fool, an insignificant, minor figure and an unfairly punished, sick man? Prisoner No. 7 in his day wholeheartedly endorsed the ideology of crime and if he suffered from madness, then it was the madness from which the Nazis as a whole suffered.

He believed in the supremacy of a preordained nation, in despising other people, other political ideas, in brutally pursuing a policy of might is right, in the fixed idea that a war could be just and that violence could lead to a new and better world.

This kind of madness he retained until his dying day. His biographer Wulf Schwarzwälder quotes a guard at Spandau as saying Hess had told him he still stood by his final submission at Nuremberg:

"I am proud to have served under the greatest son Germany has sired in its 1,000-year history. I regret nothing. If I were to be back at the beginning I would do just the same."

A group headed by his son campaigned in vain for his release. Were they right in demanding his release? Over 40 years in jail must surely at some stage no longer make sense.

It can no longer serve the purpose of justice; it is bound to become sheer brutality. The wartime Allies, who now threaten each other with war, would have done well to let Hess die in freedom at 93.

But those who complain of the rigour of his punishment must not seek to set aside his guilt or the ruthless way in which the Nazis persecuted people by the million.

Hans Werner Kettenbach

(Kölner Stadt-Anzeiger, Cologne, 18 August 1987)

Demolition plan to stop Spandau becoming neo-Nazi shrine

Spandau War Criminals' prison has outlived its usefulness. With the death of Rudolf Hess, Hitler's former deputy, the red brick building which was once a Prussian military prison, is empty.

There are no longer any Nazis under Allied lock and key as reminders of the crimes of the Third Reich.

There are already plans being discussed to demolish the building to make way for a supermarket. The aim is to prevent Spandau from becoming a shrine for neo Nazis.

Demolition is the only way of preventing it from becoming a monument. There are still people who refuse to learn the lessons of history.

The first reactions by hard-line Nazis after Hess's death emphasise the importance of such places for neo Nazis.

... Hess was, after all, the Führer's deputy. No leading Nazi served his master for so long — or for so long received punishment for his master's actions. There was constant debate about whether or not he should be released after so long in jail.

Motives for demanding his release varied from humanitarian to political sympathy. And complaints that the Nuremberg tribunal was not conducted along constitutional lines.

Yet Hess' suffering was nothing compared with what millions of other people suffered at the hands of the Nazis under the regime he helped to establish.

Hess did not live to be pardoned. He is now to be buried at Wunsiedel. It is to be hoped that there will be no Nazi or neo Nazi march-pasts at the funeral.

(Frankfurter Rundschau, 19 August 1897)

■ FINANCE

Germans step up investment in America

DIE WELT

The low dollar exchange rate and protectionist threats have accelerated German plans to step up commercial involvement in the United States.

Increasing investment is one way of getting around trade barriers. One example is Bosch, which has been in America for 80 years. It is increasing manufacturing capacity and reducing its dependence on (getting dear) imports from Europe.

Its investment in America in all sectors is up 40 per cent this year compared with last.

In mechanical engineering, West Germany's largest industrial sector, the policy means consolidation.

The emphasis on the American market began in the era of a strong American dollar. Now German firms are beginning to build up their service organisations.

It is likely that they will also go in for component manufacture or assembly in the US to deal with the competition in the long-term. The most attractive solution is to take over an existing company.

Bosch, the Stuttgart-based group, is to pour DM170bn into America between 1988 and 1990.

The most important Bosch project in the USA, scheduled to be tackled this year, is the extension of series production of anti-blocking systems at the works in Charleston and Anderson in South Carolina.

By expanding manufacturing in the US, where Bosch employs about 3,400, it will cut its dependence on imports from Europe.

Voith, the machinery and plant manufacturing group based in Heidenheim, has developed a forward-looking strategy which involves extending capacities in the US, where it employs 1,000.

Nine months ago Voith took over Allis Chalmers Hydro Inc of York that has a turnover of 80 million dollars a year and employs almost 600.

The German organisation will produce hydro-turbines and pump turbines in the US under the name Voith Hydro Inc.

Voith has been represented in America for some time by subsidiaries Voith Inc and Voith-Morden Inc of Appleton, involved in the manufacture of paper machinery and fabrics technology.

Trumpf Group of Ditzingen, tool manufacturers, are also planning to expand its subsidiary's capacitites. The US company at present employs 170. The aim is to limit dependence on supplies from the Federal Republic, currently about 40 per cent.

Heinz Wüstefeld, chairman of Wintershall AG, is also keen to invest, although there is not a lot of room for manoeuvre for his company to exploit the present favourable situation.

Long-term strategy is now always concerned in boosting interests in the important North American market.

Pressag in Hanover say that the dollar exchange rate very much influences immediate decisions.

Helmut Werner, chairman of Conti, and Mark Wössner of Bertelsmann, do not conceal the fact that the current dollar exchange rate is very favourable for investment.

Mannesmann, Thyssen and Henkel maintain that they are not under any pressure from current American legislative intensions or exchange rate developments.

Nevertheless Mannesmann and Thyssen are taking advantage of the low exchange rate for investments already planned.

At the beginning of 1988 Thyssen will put into operation a pressing factory in Kentucky. The operation represents an investment of DM100m.

Henkel is not worried about protectionist dangers because it produces in 20 locations in the US. Over the past few years the company has contunuously expanded its position as a leading supplier of specialised chemicals by introducing a number of new products and developing old ones further.

In the course of this year Henkel has acquired Oxy Process Chemicals and Partner Chemicals, and become involved in the joint venture Hengel-Hercules.

In addition Henkel has acquired over 25 per cent in two other companies, Loctite Corp (adhesives) with a turnover of 267m dollars, and Clorox Company (detergents) with sales of 1.1bn dollars. Henkel's share is to be increased to 30 per cent.

Henkel has a 50 per cent holding in the Aqualon Group (producing among other things thickening agents for dyes).

The chemicals industry's strategy is not really related to current developments. For a long time the three major companies and most of the medium-

Continued on page 7

Mushrooming Mercedes-Benz heads the big league

Daimler-Benz had a turnover of about 65.5 billion marks last year, which makes it the biggest firm in Germany.

Only the state-run Bundespost and Bundesbahn set aside more money for investment than the Stuttgart group.

It employs 320,000 people, which makes it the third largest employer in the country, behind only the Bundespost and the Munich electro-engineering giant, Siemens. Daimler-Benz paid 3.4 billion in earnings-related tax last year.

Its turnover surpassed both Volkswagen's and Siemens' in 1985 when it took over AEG, the third largest electronic and engineering group in Germany.

Daimler's place at the top of West Germany's 100 most powerful companies seems assured. It is in the midst of changing its organisation to take account of its ever-wider involvement in a high-tech age.

In a top-management shake-up, Edzard Reuter in September takes over from Werner Breitschwerdt as chief executive. Breitschwerdt is stepping down before the end of his contract. There had been a lot of criticism that his methods of leadership were not suited to the company's more diversified role.

After having taken over MTU, the engine manufacturers, the aviation company Dornier and AEG, Daimler-Benz is now involved in discussions about the future of Messerschmitt-Bölkow-Blohm (MBB) of Munich.

MBB, 52 per cent of whose equity is owned by the federal states of Bavaria, Hamburg and Bremen, has been enthusiastically looking for a partner in the private sector.

The dark horse in the race has been the car maker Ford. The company has risen from 22nd to 14th on the top-100 list and is no longer in the red. Grundig has also done the same thing. And this against a trend towards lower turnovers, some more than 10 per cent.

Companies in the energy and oil sector have been the ones in the main to show drops in turnover, because they are particularly affected by the fall in oil prices.

This has not influenced profitability usually, because sales have remained the same, but at lower prices.

Chemicals multinationals have been hit not only by the low dollar exchange rate and crude prices, but they complain that there has been a loss of confidence since Sandoz, Basle, polluted the Rhi[ne]. Nevertheless they are as ever well among the profitable companies.

There have been differing developments in the computer industry. Siemens has had to vacate top place, and not only because Daimler-Benz has become stronger by acquisitions.

Siemens has recorded a drop in turnover of 14 per cent, very much affected by results in the nuclear energy sector.

According to statements from nuclear power stations turnover has been knocked to the tune of billions, but this has not shown up in the Siemens annual report.

IBM's subsidiary in the Federal Republic has been caught in a similar manner. Turnover has dropped nine per cent.

The star of the computer industry at the present is computer manufacturers Nixdorf. The company is now listed at the 52nd place, in the middle of the list. It has had an increase of turnover of 15 per cent, one of the few companies that has achieved growth without having made acquisitions.

The mechanical engineering sector, very export-oriented and as a consequence affected to a considerable extent by dollar exchange movements, has come through relatively well.

In some companies there has been a drop in business volume, but despite the unfavourable dollar exchange rate they have shown increases in profits.

West Germany's mechanical engineering sector was, in 1986, number one on international markets.

The total value of exports was reported to be almost DM41bn, almost a quarter of the total mechanical engineering exports from western industrial countries.

The jobs situation differed from company to company, but most companies last year recorded a drop in their labourforce.

The only increases were recorded by companies that had taken over other companies such as Daimler-Benz and Rheinmetall.

The ten largest companies, with the exception of Volkswagen and Siemens did not employ any more people, to any noticeable degree, than in the previous year.

Otherwise there was relative industrial peace in the list of the 100 largest industrial undertakings in the Federal Republic.

(Die Zeit, Hamburg, 7 August 1987)

■ BUSINESS

An unlikely combination gets together in the rag trade

DIE WELT

Fashion designer Karl Lagerfeld moves easily in Parisian society. He surrounds himself with luxury and elegant models.

Textiles manufacturer Klaus Steilmann owns factories in Wattenscheid. He drinks beer and spends his leisure hours following the fortunes of Wattenscheid FC, buried in the Bundesliga's second division.

But the two are business partners: they have signed a deal under which Steilman will make a Lagerfeld collection of women's clothing.

The fact is that the differences between the two men are deceptive. Both have in common a nose for fashion and business.

When a silver-grey Mercedes slid up almost silently to the 1950s Wattenscheid factory building one day this month, workers gathered at the windows.

There was a sense of excitement in the air when the car door opened. Two men got out, Steilmann and Lagerfeld.

Steilmann, in a dark-blue suit with a light-blue shirt, obviously felt at home. But everyone's attention was on the other man: Lagerfeld.

His hair was smooth, brushed-back, and he wore dark glasses. Everyone waited expectantly for him to turn his head and confirm what they already knew. He did indeed have a little pigtail, à la Mozart, at the back of his head.

There was some guessing at the value of his clothes, his brown satin waistcoat, his brown sports jacket and his trousers. So that's the man from Paris who is going to do business with our boss.

Canteen lady Else Stratmann then said what many thought: "Honestly, I like our boss better." She is small and plump and married to a butcher.

Lagerfeld from Paris looked just like a fashion designer conceived by Moliere. He is the famous German whom most Germans only knew of through the clothes he has created.

Things are about to change. Lagerfeld and textiles billionaire Steilmann have signed a contract to produce a Lagerfeld collection of women's fashions that will be made by Steilmann in Germany.

In itself there is nothing particularly surprising about that. Lagerfeld has lived for the past 30 years in Paris. He is bringing to the deal not only a feel for fashion but a lot of business acumen that he acquired in North Germany, where he was born. If the two are seen with each other it is obvious that never before were two more opposite men brought together.

Lagerfeld is at home in the world of art and artists, castles and country residences. He has recently changed a penthouse in Monaco for a villa.

His splendid world is decorated à la Louis XIV. He wears silks and satins, in direct contrast to artistic creations from the avant garde. His current favourites are Ettore Sottass and the Memphis Group.

In this cool computer age Lagerfeld, born under the zodiac sign of Virgo, is like a figure from a fairytale or the theatre. His work has nothing of antiquity or only just a touch of nostalgic dust.

He developed a fresh-cheeky line for the woman of today, especially for Chanel, a style that since Coco Chanel's death has come much closer to the general trends of today.

Commenting on the theatre-costume effect of the designs of his international colleagues he said: "I also design theatre costumes. Many a designer would benefit from doing so. Then they would not need to work off steam in their designs for their collections."

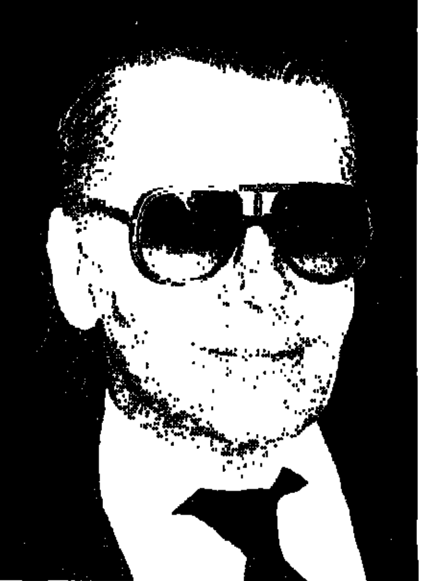
Lagerfeld designs clothes for men in Japan. He is thinking of doing the same for men in Europe, because men here are becoming more fashion-conscious.

Lagerfeld likes to wear eccentric clothes. He would like to see other men doing the same.

He presented his first collection of watches at the Basle Clock Fair at the beginning of this year. His amusing timepiece creations were successful.

He is now preparing shoe designs for the exclusive shoemaker Charles Jourdan for the autumn. From then on he will be providing fashion designs from head to foot.

His father's firm in Hamburg produces canned milk under the name *Glückskleeblatt*, (The luck of the cloverleaf) and it could be said that it has brought Lagerfeld himself luck with a feel for fashion.



Champagne . . . Karl Lagerfeld.
(Photo: dpa)



Beer . . . Klaus Steilmann
(Photo: Private)

Steilmann was not born into luxury. His father was an estate manager on the island of Rügen, and there was nothing of the romantic as in the novels of Hedwig Courths-Mahler about his father's stewardship. He took over properties deeply in debt and in a few years dragged them out of the red, applying considerable innovation and unusual ideas.

This meant for the family that the father was often away. Steilmann's mother was the centre of his family life. Despite everything her aim was that the family should live a well-ordered life.

Steilmann, now 58, said: "I had a good childhood. The best was Saturday afternoons. We had bread rolls then. We looked forward to that the whole week."

Lagerfeld's mother has played an important role in his life. She introduced him, when small, to the world of clothes and tailoring. When she visited her dressmaker with him he was sharply critical of the clothes she had made. With a sure touch he searched for the right colours and designs for her.

Steilmann began his career in the turbulant post-war years in the textiles industry.

His father's death put an end to ideas of going to university, so he looked for training in an industrial branch that had a future. A friend of his mother's recommended to him the clothing trade.

He began in 1950 as a temporary worker in C & A Brenninkmeyer in Berlin. At the same time he went to night-school and at 22 he got his Abitur, the university entrance examination.

Eight years later he had had his fill of being a salaried employee. He had ideas that he was unable to put into practice.

So he put small ads in the papers, looking for a small ready-made clothes shop near Essen. He had a start-up capitalof DM40,000, a sum that to this day is regarded as magical in the Steilmann organisation.

Last year the whole Steilmann Group had a turnover of a billion marks, marketing coats, clothes, costumes, blouses and skirts, trousers, children's and men's ready-made wear, but DM40,000 is not given out easily for fashion photographs, briefing trips or new office furniture.

The only decorations in the Steilmann headquarters in Wattenscheid are a few green plants and countless football pictures, certificates and glass-cases full of cups and trophies. At first glance it looks like the central office of a football association rather than of a fashion company.

Steilmann's office on the first floor does not include either a busy secretary barring the way or mysterious closed doors, emphasising first impressions. Here there are also football pictures, cups and solid furniture.

He is president of Wattenscheid 09, which plays in the the second division of the Bundesliga. He also sponsors it.

He became closely involved with soccer after having a heart attack at the age of 34. Now he plays in the veterans' team every Wednesday and afterwards plays skat (a card game).

Steilmann, who never spends less than 10 hours at the works, says: "I don't need parties and going to music festivals in Bayreuth. I love my work. It fills my life. Anyway I prefer beer to champagne."

It is not surprising then that Lagerfeld, the spoiled darling of the fashion world, wrinkled up his nose when he visited the Steilmann headquarters in Wattenscheid for the first time.

The headquarters lie directly beside the Hamburg-Dortmund-Düsseldorf rail-line, Intercity trains regularly shake the building and rattle the football trophies in the glass-cases.

Only at the beginning of this year did Steilmann provide DM350,000 to put up a sound-proof wall. The trains rattling by had all too often interrupted telephone calls to the USA. That was too expensive for Steilmann who counts the cost of everything.

Rooms are being cleared in the headquarters building. Walls are being painted and desks put aside. Then Lagerfeld will have his own office in Wattenscheid.

So as to minimise the difference between working in Paris and Wattenscheid, facade of the building facing the railway line is to be painted.

Ruth Will

(Die Welt, Bonn, 13 August 1987)

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sized firms have had their own subsidiaries, many production subsidiaries, in the United States.

Few of them are much interested in founding their own green-field operations. The inclination to take over an existing company is stronger than it was at the time of a strong dollar.

Hoechst states quite frankly that the low dollar exchange rate influenced the decision on the acquisition of Celanese for 3bn dollars.

Basically, however, the aim is long-term: to be involved in the largest market in the world at least to a measurable extent.

The exchange rate is of no significance as regards investment intentions for Volkswagen. Medium and long-term strategies cannot be made dependent on prevailing exchange rates.

(Die Welt, Bonn, 6 August 1987)

■ THE MOTOR INDUSTRY

Another rotary engine spins into action

DIE WELT

The inventor of the rotary engine, Felix Wankel, 85, has come up with a new version which is to be tested next year by Mercedes.

It is a 1,000cc model that is claimed to develop an incredible 2,000 horse power.

The original Wankel has virtually been virtually written in Europe because of its lack of durability, high fuel consumption and high exhaust emission.

After the oil shock in the 1970s, fuel economy became much more important than technical brilliance and construction of the Wankel engine was abandoned in West Germany.

Twenty-seven of the 28 firms that had contracted to manufacture rotary engines under licence (they included Rolls Royce and General Motors) abandoned the idea. Mazda alone stuck to its guns.

Today, 10 years later, Mazda is still developing and improving the engine in conjunction with Wankel.

Chief executive Kenishi Yamamoto and development director Takahashi Kuroda have steadily improved the design, boosting performance and cutting fuel consumption of what was unquestionably a gas guzzler.

Nearly two million sports cars with whispering rotary piston engines have run off Mazda assembly lines. Three- and four-cylinder engines have been put through their paces.

A three-cylinder rotary-engined Mazda not only lasted the distance at Le Mans but came seventh in the gruelling classic.

Mazda is still convinced that rotary engines run more smoothly than conventional pistons.

"The rotary engine has fundamental advantages," says Yamamoto. "It is much lighter and smaller than a conventional piston engine. It generates high power and runs with low vibration.

"We have reduced to a minimum the disadvantages, such as its high fuel consumption and emission."

His company has put its money where its mouth is, investing over DM400m in a new Wankel engine works.

Although Wankel and Yamamoto are personal friends and not just comrades in engineering and business, Lindau — Wankel's home on the shores of Lake Constance — and Hiroshima have suddenly become competitors.

The tireless 85-year-old inventor has set out to shock the motor industry with yet another revolutionary change.

After a number of other successful design ideas launched in recent years Wankel now feels he has come up with the engine to end all engines: a dramatic improvement on his original rotary design.

The disc-shaped piston rotates eccentrically round the outer axle (see photo), eliminating centrifugal force on the bearings and making up to 40,000 rpm possible.

Conventional engines reach the end of their tether at well under 10,000 rpm.

Easily, quietly and smoothly, the new-look Wankel engine, a prototype of which has been found to whisper like a turbine, is said to develop 2,000 horse power from 1,000cc.

That hardly seems credible when compared with conventional engine performance. Wankel himself thinks mainly in terms of the future, saying the new design is ideally suited as an emission-free hydrogen-fuelled engine.

Daimler-Benz will be the beneficiary. In December the Mercedes management announced that Wankel's life's work and his Lindau R & D laboratories were to be bought and kept going.

Daimler-Benz has since bankrolled the lab, paid the salaries of its staff of 20 — and is entitled to put its findings to commercial use.

This move soon proved to have been a shrewd deal. Wankel and his staff had a (non-turbo) mechanical loader in the pipeline that will boost the performance of medium-range engines and earn a fortune.

"It's a strikingly simple idea," says Daimler-Benz development director Rudolf Hörnig, "and, as trials show, a most effective one."

The device, which boosts the intake of air for combustion, is to be made by Kühnle, Kopp & Kausch (KKK) of Frankenthal, the largest manufacturer of turbo loaders in Europe.

KKK is a Daimler-Benz group company.

Next year the new Wankel engine is to be tested in a Mercedes. If it passes its test it will be a late but none the less welcome vindication of "long-term thinker" Wankel, who was long upset at appearing to have been written off by German industry.

Daimler-Benz director Werner Niefer, in charge of the Mercedes car division, is convinced the new Wankel engine has a great future; he greatly regretted discontinuation of the Mercedes C111 Wankel in the 1970s.

Many experts have wondered why Wankel, who is back at work (from 10 a.m. to 8 p.m.) after eight weeks at a health resort, repeatedly comes up with brilliantly simple solutions that entire teams of development engineers fail to hit upon.

Hörnig feels the "specific way in which he consistently approaches problems and seeks solutions" is why. His conversations with Wankel would give any technician genuine pleasure. The grand old man of Lake Constance is not a man who "stands to attention when a Daimler-Benz director calls; he is a tried and trusted partner who is well aware of his worth."

Yet Wankel the technical revolutionary dismisses his brilliant ideas as though they were a matter of course. "If a German engineer takes a few soup cans with him into the jungle he can be sure to emerge with a locomotive."

This dry, droll approach was very much part of his outlook in 1930 when he first had the idea of designing a rotary piston. Unemployed at the time, he wrote in his diary:

"Lay in bed, reading about the Hohenstaufens, thinking about technical problems from time to time.

"Suddenly struck me that centrifugal force could be offset without friction or bearing strain by rolling the mass within a ring. "Read on about the Hohenstaufens."

Heinz Horrmann

(Die Welt, Bonn, 6 August 1987)



Still turning at 85 . . . Felix Wankel.
(Photo: Archives)



Soviet law

Continued from page 4

call to introduce greater clarity and reliability to the legal system.

The Soviet system is still marked by the long-winded execution of fundamentalist ideas, agitative language and the inexact definition of offences.

For example, Mathias Rust, the Red Square flier, will be given a taste of what this means when he comes to trial in September.

One of the offences of which he stands accused, namely "hooliganism", is described in Article 206 of the Soviet Criminal Code as being marked by "extreme cynicism and particular impudence".

The explicit norms of western concepts, in which the elements constituting a crime should be defined as clearly and beyond doubt as possible (in accordance with the "if-then" line of argumentation), remain the exception in the Soviet Union.

Soviet law prefers general laws in line with the following pattern: everyone has the rights and duties laid down by law.

Perhaps it would be a good thing if there were some mention of the fact that individuals have rights too.

Three laws passed by the Supreme Soviet in June show that the new norms are more about the declaration of principles than precision.

These three laws regulate the rights of state enterprises, the tentative steps towards more democracy, and the ability to contest administrative acts.

This was a missed opportunity to introduce a changed style to legislative new ground.

Although the drafts were clear and unambiguous the final result was declaratory and not normative.

In particular, the law on state enterprises does not contain a single to-the-point and unambiguous article.

The change, it was claimed, was effected "at the highest level". It looks as if the flexibility of interpretation was regarded as more important that a greater sense of legal definitiveness.

Don't commit yourself while things are in a state of flux would seem to have been the guiding motto.

According to Professor Fincke, the authors of the draft version of this law are deeply disappointed.

In their eyes, the law on state enterprises is "a disgrace".

Hans-Joachim Deckert

(Rheinischer Merkur/Christ und Welt, Bonn, 7 August 1987)

■ INDUSTRY

Holography takes over where X-rays left off in testing for structural flaws

Bremer Nachrichten

Holography is finding more and more industrial uses, especially to discover structural weaknesses where traditional techniques such as X-rays and ultra-sonic tests are not effective.

Typical examples of application are synthetic carbon-fibre surfaces, retreaded aircraft tyres and research into reflecting surfaces such as car bodies.

The space between the twin surfaces of synthetic carbon-fibre consists of a hexagonal aluminium honeycomb structure.

But it cannot be seen if the edges of the honeycomb are firmly bonded with the carbon fibre surfaces.

Which parts of a car's bodywork reflect the most heat? Sheet metal cannot be seen to finely vibrate, and walking round a car with a microphone is an unsatisfactory technique for locating sound sources.

Holography supplies the answers because it can be used to take measurements accurate to within a 200,000th of a millimetre.

Unlike photography, holography does not reproduce an image of the object photographed; it reconstructs the light waves emitted by it at the point where the hologram was taken.

When you look at a hologram, the object appears three-dimensional, not two-dimensional like a photograph.

The light source used in holography is a laser, which emits stimulated radiation amplified at a specific wavelength.

Laser beams consist of coherent light, meaning light bundled at this specific wavelength — like the regular waves from a pebble dropped into a pool of still water.

These regular waves from the laser are divided into two halves by a mirror that lets half the light through. This half is aimed at the object and reflected onto a photographic plate.

That alone need accomplish no more than an even blacking of the plate. But the other half of the laser light waves is beamed via a mirror straight at the plate.

Because they arrive from different directions these sets of waves hit the photographic plate in a relationship to each other that can, perhaps, be described as staggered, and like waves of water, crest and trough can cancel each other out.

By the same token crests heighten each other and troughs too intensify each other. The result is a specific pattern on the plate: the hologram.

If a laser is beamed at this pattern the wave structures bend at its latticework in such a manner that the same wave structure is created as if one were looking directly at the object.

In terms of water waves, the result is a lattice structure in the water that reproduces a wave front exactly corresponding to the wave structure of, say, an irregular river bank.

Measurement technicians are not satisfied with a single holographic representation. They superimpose a second on the first.

It may be a hologram of a an unused workpiece superimposed on that of one which has been exposed to wear and tear.

It could be a hologram of the lightweight structure initially mentioned: one exposure of the structure when cold and another when warm. Or a car with its engine running and not running, a retreaded tyre half-pumped and pumped hard.

When the superimposed holograms are observed, fresh interference between the two reconstructed wave patterns will produce a pattern of stripes in which light is either eliminated or intensified.

Irregularities in these stripes indicate differences in dimension or minute defects in the part examined.

So holography would seem to be the ideal inspection method. But it is extremely expensive.

It requires very expensive optical equipment and physicists who have specialised in the technique and can set up the arrangement and evaluate the result.

That is why holography is seldom used in practice. But leading motor manufacturers use the services of holographic laboratories — and retreaded aircraft tyres are tested in this way too.

Research scientists in many parts of the world are working on a simplification of the technique. They include the Bremen Institute for Applied Radiation Research (BIAS).

Its Dr Thomas Kreis was awarded the Hans Rottenkolber Prize at the Laser '87 fair in Munich for his new method of evaluating holograms.

The prize is awarded every other year. Rottenkolber is a pioneer of laser-backed and holographic inspection technology. His company, Rottenkolber Holo-System GmbH, manufactures holographic equipment.

Evaluation of holograms is still particularly expensive when it comes to specifying in precise detail the differences in dimension. But, amazingly, laser beams can be used to measure differences to within one hundredth of the light wavelength.

This is because the interference stripes are not arranged in a black-and-white bar code pattern but, in keeping with the wave structure of light, in wave-like or sinus-shaped transitions from light to dark to light and to dark again.

The distance between light and light or dark and dark corresponds to a complete wavelength. Once the brightness of a hologram point is established, deformation of the workpiece can be precisely quantified.

In the past stripes have been counted and wavelengths approximated. Four holograms with different interference stripes from different angles make greater accuracy possible — but complicate the procedure, costing time and money.

In Bremen Dr Kreis, who studied mathematics and mechanical engineering, has devised a method by which holograms are taken by a video camera, the brightness is noted in the form of digitalised computer data and disparities in measurement can then be worked out by computer.

He uses the Fourier transformation or harmonic analysis principle, which may perhaps best be described as follows:

A line is drawn through the stripe pattern and brightness is measured along this line. The result is an irregular wave line of brightness values. An irregular wave line can be visualised as being made up of mann different waves.

They could, for instance, be the sound waves generated by several instruments playing a piece of music. Yet the ear is still capable of identifying the individual notes. In other words, it reconstructs from an irregular wave pattern the individual, regular sound waves.

This process is repeated for the hologram not just for a single line but over the entire surface area.

Once the basic waves have been identified, wave crests can be measured at each point on the plate, establishing the exact stage of the wave or interference. The precise deviation from standard can then be calculated too.

This procedure has many advantages. As the laser light is beamed on the object at various angles, different views of the object are reflected onto the hologram.

That results in a difference in brightness over the entire hologram that can be filtered out as a long-wave component of the stripe pattern.

High frequency errors that can similarly be filtered out are known as speckles. They are interference that invariably occurs when a rough surface is lit by coherent light.

The minuscule roughness structures lead to wavelength differences among wave fronts. Speckles look much the same as photographer's grain — except that they glitter.

This description makes it clear that a large number of calculations must be made for each individual pixel or dot. They include imaginary numbers (an idea that may not upset mathematicians but will irk the less numerate).

So the Bremen institute has joined forces with several others to develop a special computer for this work as part of the European Esprit research programme.

Lasers play a leading role in modern measurement technology and holography is still in the early days of a major development, the progress of which is closely linked with computer technology.

Computers might, for instance, be used to calculate holograms of designs rather than two-dimensional representations. The design engineer could then take a three-dimensional look at his handiwork on the visual display unit.

(Bremer Nachrichten, 8 August 1987)

Continued from page 1

UN facilities, with less interest being shown, especially by US public opinion, in shouldering the risks of what is often felt to be the heavy-handed rôle of a hegemonial power.

The Soviet Union in contrast still shows signs of being reluctant to enter into cooperation that cannot, with a view to other theatres, be made out to be the result of a bilateral understanding with Washington.

In the circumstances it is, perhaps, more readily apparent how lucky other regions are (at least where preserving peace is concerned) that can boast firm pact structures, where reciprocal ties prevent dangerous moves and the risk inherent in any given wrong move is readily apparent.

It may be possible to keep the peace without hegemonial powers, but not without power structures.

(Der Tagesspiegel, Berlin, 16 August 1987)

■ EXHIBITIONS

Life and death and the brilliance that was Egypt

Hannoversche Allgemeine

An exhibition called "Egypt's rise to a world power," has brought together what time had separated: a sculptured bust of King Thotmes III dating from the 15th century BC.

At some time, somewhere, the bust was broken and the parts became separated. But eventually the face turned up in Cairo and the rest in New York.

Now, for the first time the work of an artist from 3,500 years ago can be admired as a single entity, just as it was when it was first created.

This is a highpoint of the Hildesheim exhibition — but not the only one. Fragments from Boston, Paris, Amsterdam and Luxor have also been put together to recreate a portrait of Thotmes' son, Amenophis II.

The exhibition deals with the conquerors of the 18th Dynasty in the New Kingdom, the period when Egypt rose to become a world power.

It is made up of more than 300 items from collections in Cairo, Paris, New York, East Berlin, Leiden, Leipzig and other places. It gives a picture of a society in change, going off in new directions, a period that was to be one of the most brilliant epochs in Egyptian history.

In the space of less than 100 years Egypt increased its territory fivefold, reaching the Euphrates in the north and stretching deep into Nubia in the south.

The ancient civil service grew powerful to challenge the military and the beginnings of the priesthood of Amun-Re were established. This priesthood rocked the Kingdom and its position as a world power in the period of the Heretic Kings in the 14th century.

Egypt's rise to power came from a period of deep humiliation. About 1650 Before Christ the Hyksos spread from Asia and overran Lower Egypt, making the king of Upper Egypt their vassel. There is considerable dispute over the ethnic origins of this tribe.

Their rule lasted 100 years until King Ahmes (1542 to 1517) succeeded in freeing the land.

The Egyptians learned a great deal from these foreigners who introduced to the Nile the horse and cart.

From this period on war chariots were the nucleus of the Egyptian army and a self-confident officer corps carried the fame of the Pharaoh afar.

In Syria the Egyptians came into conflict with the Mitanni Kingdom. After getting embroiled in various battles the Egyptians, under King Hatshepsut (1479 to 1458), suffered setbacks but the situation was saved by his son, Thotmes III.

This is roughly the background



Features found: a faceless Thotmes III with the re-soled version.

(Photos: Catalog)

against which the Hildesheim exhibition is set.

Life is given to this period not just by listing external events but by taking into consideration internal conditions in the state, its social groups, its aims and values.

Although the exhibition deals with the splendour of the pharaohs the lower orders and their daily life are not entirely ignored, despite the general lack of source material. Life at the bottom. At the top the king.

The exhibition depicts life from Ahmes to Thotmes IV (1402 to 1392). This includes the period when the civil service in the 18th Dynasty noticeably began to change compared with the previous period.

Hereditary office was withdrawn, replaced by a personal relationship to the king, frequently won by accompanying him in his wars.

In competition with the king for power was the priethood of the kingdom's god Amun-Re in Thebes. The priesthood's wealth was growing all the time, which gave the priests a material basis for their political power which no king could ignore.

Echnaton learned this later when he tried to introduce his theological revolution.

It was a time of self-confidence, because the Hyksos kings had left a cultural waste behind them. In style the Egyptians fell back to the earlier period of the Middle Kingdom. This produced a political programme and a statement of intent to build up the new strength of the state. The exhibition in Hildesheim

Continued on page 13

It's Mohenjo-Daro for the well-ordered, urban life

If mention is made of the highest cultures of mankind one thinks mainly of Mesopotamia and Egypt. But there are indications that all good things come in threes.

Excavations have been carried on since 1922 in Pakistan, the country of origin of the Indus civilisation. What has been uncovered since then shows that in the earlier settlements there was a high degree of culture.

The people of the north-west corner of the Indian sub-continent were "urbanised" 4,300 years ago, for they had created a well-organised urban life.

An exhibition made up of 400 items has now been collected of these "forgotten cities of the Indus" that is on display in Aachen's Town Hall. The exhibition is under the patronage of Unesco. The items have never before been seen outside Pakistan.

This mysterious culture, that sank without a trace about 2,000 years Before Christ, was exemplified by two towns. Harappa, lying on the Riva, a tributary of the Indus. Harappa was the first location to be explored and gave the culture its name.

Mohenjo-Daro, on the lower reaches of the Indus, has been brought to public attention by the considerable efforts made by Unesco to save the ruins from destruction by salty groundwater.

There are now over 1,000 locations known, spread out over an area of a million square kilometres — from the Himilayas to the Arabian Sea, from the frontiers of the present Iran to Delhi.

The most recent French excavations in Mehrgahr have revealed that the beginnings of cultural development in the Indus valley stretch back to the 8th cerntury Before Christ.

This early period is represented in the exhibition by castings of neolithic



Seal with cuneiform script from Mohenjo-Daro

graves and funerary objects. The female figurines, that are unique in their enormous charm, date from 2,000 years later, the middle of the 4th century.

About 9,000 years ago homes and storehouses were built from clay bricks, forerunners of later Indus architecture, which cleverly created systems to bring and carry away water. This is documented at the Aachen exhibition.

There is hardly any evidence in the excavtions so far of weapons and material of war, nor any evidence of a hero cult.

This indicates that the civilisation was a "peaceful" culture that in its heyday maintained an extensive trade network and that finally fell under the onslaught of the Arians. Could this have happened perhaps because this civilisation was unwilling or incapable of defending itself? The state of explorations so far only allow for speculation on this point.

The same is true for the enormous number of terracotta objects, pots, jugs, cups and jars of all shapes and sizes.

These pieces, that show the people were in perfect command of the use of the potter's wheel 6,000 years ago, create dismay. The diverse decorations, the variety of the shapes not only show regional differences but also show cultural influences from Iran, southern Central Asia and even Mesopotamia.

For a short while experts considered a relationship with the Sumarian-Akkad cultures. Script tablets preserved with their strange mixture of picture drawings and cuneiform script do not indicate any close relationship with Mesopotamia and have not been decoded so far.

Unique seals can be seen in Aachen as well as the funerary objecta from the later periods of the Indus civilisation, "the third and second centuries" that were discovered in Quetta in 1985.

These treasures made of gold and precious stones bear witness not only of their high standard of artistic workmanship but are also another variation on the old archeological rule of thumb that "what cannot be explained is regarded as something to do with a cult."

To be on the safe side the undertaker was at first appointed to be a "priest king."

Wolfgang Platzeck

(Westdeutsche Allgemeine, Essen, 25 July 1987)

■ THE ARTS

Bad private drama schools blamed for high, chronic unemployment among actors

Süddeutsche Zeitung

About 40 per cent of actors in Bavaria are out of work at any given time. Too many are being turned out by an ever-increasing number of private drama schools with varying reputations.

The accusation is that many of the private schools are more interested in making money by encouraging people to enrol who do not have the talent to become actors or actresses.

The result is that increasing numbers of bad actors are being released into what is a competitive field dominated by graduates of the big, state-backed drama schools.

There is no reason to believe that the situation is likely to change in the near future. Acting is not a closed profession and people who feel they have the ability can enrol at a drama school and be trained if they want to.

Despite the expanding culture market the chances of getting an engagement are slim. There are more than enough of the younger generation of actors and actresses coming from public drama schools to take up the vacancies in theatres.

At first glance all this has little to do with Uschi Glas. The young woman on the stage shouts and whimpers, she stamps her feet and throws herself about in despair.

Her attacker cowers over her, his knee pressed painfully down on her forearm. His hand is round her throat to throttle her.

Majorie gets her left hand free for a moment. She searches about over the floor. Suddenly she has an insect spray in her hand, a weapon, in fact.

There is a short hissing sound and her attacker lies defencelessly on his back. Majorie's revenge can begin.

This struggle took place in an empty cellar. The Zinner Studios, a private drama school in Munich, had invited people to come to an audition. The play was William Mastrosimone's sensational rape drama *Extremities*.

Alicia Hoechner, 22, played Majorie — the evening was a double première for her: she was playing a main role in a play for the first time and she was showing what she had learned over the past two years.

More than 100 people squeezed into the cellar. They all suffered in sympathy with Majorie when she struggled with the intruder, heard her cries and saw how she defended herself.

Two and a half hours later Alicia was happy. She pulled through. She did not fuzz her lines and did not get hurt in the very realistic struggle on stage.

Her parents and friends congratulated her. Her brown eyes were sparkling and she said that she was "really happy."

She had studied parts, dancing, gymnastics, singing and elocution for two years. It would take at least another year before she could take her final examinations at the Zinner Studios.

A semester cost her DM7,200, DM400 per month. She spoke of the willpower one needed for such training. She was enthusiastic about the work put into *Extremities*, and she told about her plans.

She would like to become well known not only in the theatre but also in the cinema and television as well.

It is difficult to say how realistic such aspirations are. The reputation of private drama schools is not very good. There are in Munich and its surroundings about half a dozen.

The complaints made against them are biting. There are too many black sheep among the instructors, teaching personnel hastily got together, more interested in the money of their trusting but in the main untalented pupils than anything else.

People are led to believe that the will to learn is the way to fame, but in truth it can be just the road to unemployment.

Complaints of this sort have been recurring over the past few years, particularly from Hellmuth Matiasek, former head of the sole municiple drama school in Munich, the Otto Falckenberg School.

More and more demands are made for state subsidies for private schools. But it is not as simple as that.

There are any number of regulations. Room size and the minimum curriculum are laid down for instance. But their poor reputation remains.

More and more applicants apply to take the entrance examination at private drama schools. In a time when there is a shortage of apprenticeships and the outlook for unversity places is gloomy, acting is more than ever a dream job. This is why negative reports in the media hardly shock anyone.

This is a development which explains why Ali Wunsch-König, the boss of the renowned "Neue Münchner Schauspielschule" would not be interviewed.

She said that it was painful to be attacked and anyway she had no time, "in the next four weeks there was nothing on. You have to understand that."

So on another day we met another woman whom we hoped would throw

❛Black-sheep instructors and money-grubbing schools encouraging people without talent❜

some light on reports about people who made a business out of drama schools and the black sheep in the métier.

Anette Wagner is in many ways in a position to talk about the less happy aspect of her profession. She did a course at a private drama school but did not complete it. She is currently unemployed.

She did not give her real name because, she said, "people would say that I only said all that to get a job."

Anette went to a private school just for the sake of her parents. What she has to say about the school is shocking.

She said that instead of speech training and individual instruction pupils were sentenced to work in the garden for afternoons on end.

"The instructors confined themselves to encouraging the totally untalented. Actually I believe no-one learned anything of use at this school," she said.

After eight months she left and took private lessons.

It seems that the directors of these schools are aware of such cases. Manfred Rudolf, for instance, head of the Zinner Studios, more precisely the Vocational Training College for Actors for the Theatre, Cinema and Television, advocates closer state control of private schools. He claims there are too many of them that give lessons "at home in the kitchen."

There are 14 instructors in the far from spacious rooms of the Zinner Studios. The course is comparable to courses at state schools, from fencing to the history of the theatre.

The difference begins with the working hours of teachers and taught. Private schools can hardly afford full-time instructors, so most of them have some other kind of employment.

Karl Neusiedler, who teaches phonetics, is a trained actor, but his main job is a full-time salaried employee in an office. This is not at all unusual for students at a private drama school.

Most of the budding actors and actresses look for part-time jobs themselves to earn some money.

How should the regulations be tightened? Should an obligatory curriculum be laid down? Should the minimum qualifications for instructors be stipulated? Should there be entrance examinations at all schools?

Manfred Rudolph is not in favour of any of this. The Zinner Studios do not have entrance examinations. Applicants have to pass through an interview and do an eight-week probationary period. Rudolph said that everything else would come out in the course of time.

At interim examinations at the end of the semester the 70 students of both sexes are sifted out.

The number of students left for the qualification classes shows how strict the selection process is. There were only four in Class F. In the beginners classes A and B there were up to 20 actor and actress students. What happened to the others?

Rudolph said that he did not throw anyone out. Those who failed had to re-do the course or leave of their own free will.

Zinner Studios student Philipp Zimmermann amplified this. He said that the most important feature was that people took decision voluntarily.

He said: "If you don't want to do something no-one chases you up." That is not an advantage for everyone because some people need to be put under pressure, but at the Zinner Studios "you have to do things for yourself."

The situation is not quite so relaxed with the competition. Dorothea Gmelin, head of the Gmelin Drama Studios, expects discipline from her pupils. Discipline is not only part of the profession, she says, but also part of the guidelines drawn up for "state-approved schools."

State recognition is a prerequisite for getting student grants. This is a vital instrument of official control of private drama schools.

The school has to present a curriculum and give some indication of what subjects will be covered.

Dorothea Gmelin holds entrance examinations twice a year. There are about 70 who turn up to take the examinations each semester. Only about ten are lucky enough to be included in the courses.

Dorothea Gmelin does not take on more than 20 students in her school that has been going for the past 23 years.

She said that it was absurd to suggest that people in her métier could get rich. Because rents, insurance and instructors' salaries had all increased she had had to increase fees.

She said that the important thing was the human element. Dorothea Gmelin, who is a kind but determined woman, said that it was a matter of thinking of every individual student.

"Everyone should realise just how tough it is. You had to be strong and stable because this profession can lead down the path to humiliating misery. Talent is important and love of the theatre, but there's no insurance," she said.

Bernd Steets knows all about the routine humiliations and the short moments of good fortune that actors experience.

Steets, 41, is a salaried employee at the "Zentrale Bühnen-, Fernseh- und Filmvermittlung der Bundesanstalt für Arbeit" (ZBF), a state-run central theatrical agency. He is a powerful man.

Twice a month auditions are held of newly graduated actors and actresses

❛Ability is important but there is no guarantee . . . it can lead to misery❜

where it is decided whether their names can be listed in the agency's central register.

Ten applicants were tested at the time, about 50 per cent usually fail.

Steets said: "When we take someone on he or she must be good." The ZBF agency, of course, competes with other private agencies.

For most newcomers, it is their first and only job. More than 5,000 are registered at ZBF. It not only organises auditions for clients but pays their travelling expenses.

ZBF take on only 200 beginners every year, corresponding approximately to the number of graduates from the nine state drama schools in the Federal Republic.

The outlook for graduates from private schools is grim. The weaknesses of the promises made by private schools are revealed strikingly. Steets said: "Usually there are tears, because many drama schools just take on anyone."

There is naturally scepticism about any form of regulation in theatrical training. The question is: just how much success is dependent on just talent. I put this to Martin Benrath.

He said at tea in Munich's Vier Jahreszeiten Hotel that it all stemmed from the determination to succeed and luck. The judgment and skill of a teacher was only of peripheral importance.

It is desirable to have clear, statutory regulations, but there can be no question of a rigid curriculum or officially recognising the reality that has been true for a long time, that there are two classes of training.

Private instructors should be obliged to provide realistic information on their work so as to protect budding actors and actresses from dubious business practices.

It should perhaps also be admitted that the standards of training offered by private schools do not measure up to the training given at state establishments.

It should not be forgotten that there are few reports of actors and actresses achieving success after having started off in a private drama school.

That should have a sobering effect on young people at these schools, just as sobering that a remark I heard made by Manfred Rudolph.

He said: "Just look, there are thousands of jobless teachers, but there is no stop to the number studying to be teachers." Is that cynical?

Wolfgang Höbel

(Süddeutsche Zeitung, Munich, 18 August 1987)

■ EDUCATION

Little goodwill evident as university battles to ban a blind student

A blind woman who wants to study has become involved in a running battle with her university, which maintains that she would not be able to complete her course "appropriately" because of her handicap. The student, Gitta Herrmann, 24, was given special dispensation three years ago to study dietetics at Hohenheim University, Stuttgart. She passed all her exams in the first year but, at the request of some of the teaching staff, her continued attendance was made impossible by a process called "rustication." This invalidated everything she had done. Last year, a court ruled that the university had not only acted illegally but had also "totally disregarded" Frau Herrmann's interests. The court ruling has not ended her problems, however. The university's case is that she cannot complete certain practical aspects of the course. Now Cornell University, in the United States says that blindness would not stop her doing a course there. Frau Herrmann would attend Cornell if she could raise the cash. Cornelia Girndt looks behind the scenes of this unusual human-interest story for the *Frankfurter Rundschau*.

Gitta Herrmann, 24, was advised by influential members of the university staff to switch to a course geared more towards domestic science. But, at the same time, they made it impossible for her to do so.

Her rustication, despite the fact that she had failed no exams, automatically invalidated all courses she had taken; it was as though she had never been to the university.

The Stuttgart administrative court upheld her appeal against rustication, yet she is still persona non grata. The university authorities are not even prepared to consider allowing her to attain a partial qualification.

Good will is conspicuous by its absence. The way in which a number of university teachers, in conjunction with the legal advisers to Hohenheim University, have rid themselves of the problem of a blind woman student stands in sharp contrast to official policy.

Last year the Standing Conference of West German University Vice-Chancellors issued recommendations on Improvements in the Situation of Handicapped Students and Would-Be Students at University.

Universities are advised to lend handicapped students assistance with specific work facilities and by a suitable revision of examination regulations.

Gitta Herrmann wasn't interested in studying law, psychology, sociology or education. All are established courses of study for blind students, but none interested her.

She wants to qualify in dietetics because, she says, she finds the subject tremendously interesting and hopes, after qualifying, to find work in the medical sector.

She lost her sight at 11, went to Marburg college for the blind for a few years, then transferred to the Mannheim Waldorf School — "because I wanted to work together with the sighted."

At the Waldorf School, where she passed her *Abitur*, or university entrance exam, she realised that she was opposed to educational segregation.

So she ruled out any idea she might have had of studying education — with the emphasis on teaching the handicapped.

She is a resolute young woman who goes around on her own, relying solely on her white stick, to see to her own business. "Otherwise," she says, "the authorities ignore me and talk only with my guide."

That is why she decided — and is still determined — to break new ground by studying dietetics.

In her application to study the course she outlined in detail how she planned to set about her studies.

She would rely on the assistance of a conscientious objector doing social work rather than military service in carrying out and describing her practical chemistry experiments.

Instead of written tests she would have to take oral exams, and she was well aware that practical courses in chemistry and pharmacology were not going to be easy in what was a predominantly scientific course of study.

But, she argues: "I am blind and a woman. If I am to stand any chance of finding a job in the clinical sector I must have ideal training and qualifications.

"And the Hohenheim course is the only one in the German-speaking world that is precisely what I need."

This stubborn awareness of the need for qualification and "temperament that overshoots the mark in her determination to achieve her ambition," as one Hohenheim *prof puts it*, are what irritated and provoked her university teachers.

They now refer to her as though she had never been a fully registered and recognised student. "Well, you know, there was a slight discrepancy there," says the university's legal adviser Eva Rieger-Pelzel.

She refers to Frau Herrmann as "the lady who, for Heaven's sake, cannot possibly study here."

Yet doubts on this score only arose after Gitta Herrmann consulted a number of staff members at the beginning of her second semester.

They then had misgivings as to how she could possibly make a success of her

Frankfurter Rundschau

course of study, as the university administration now puts it.

No mention is made of specific grounds for these alleged misgivings. Frau Herrmann has not failed a single exam since she took up residence in a bachelor apartment in Filderstadt in her first semester.

(She didn't want to live in a student hostel, saying she had spent more than enough time at a boarding school.)

She attended a course in practical botany. Her tutors helped her to scale the initial obstacles. She was given her course grade after passing an oral test.

At the beginning of her second semester she came up against Peter Fürst, Wolfgang Kraus and Hans-Georg Classen, the professors who are most resolutely opposed to allowing her to study at the university.

She approached them to discuss details of working methods and examination procedures, but they stalled, as she put it.

They said they could not guarantee that a blind student would be sufficiently sure of herself in practical work. She told them a social worker would pour the liquids into the test tubes and crucibles and describe to her the reactions. Their response was that it would then be impossible to distinguish between what she had done and what had been the work of her helper. She said she would be taking the oral exams on her own, but this argument went unheeded.



Not wanted at Stuttgart but would be accepted in America . . . student Gitta Herrmann. (Photo: Gudrun-Holde Ornen)

Instead, the three professors complained on several occasions that they felt they had been passed over in connection with the admission of a blind student.

Junior lecturers in the department of dietetics at Hohenheim do not seem to have any qualms on this point.

At the beginning of her second semester Frau Herrmann arranged for the assistance of a social worker (and medic) whose salary was paid by a Protestant Church welfare organisation in Stuttgart.

In practical zoology the social worker just stood around feeling bored because the tutors and junior staff plied Frau Herrmann with material to "see" for herself — with her hands.

The lecturer in charge of practical physics also laid on a physics student to arrange and explain the experiments. Frau Herrmann arranged with her professor to be given an oral test after every third lecture.

But that was as far as it went. After brief consultation the examination committee met at the beginning of May.

In accordance with the arguments of the hardliner professors of biological chemistry, pharmacology and chemistry the committee ruled that Frau Herrmann could not meaningfully continue with her course of study.

Practical courses in experimental subjects could not be replaced by theoretical examinations and because her course target could only be reached by means of visual control.

She felt totally disheartened. In August she was officially notified that her immatriculation had been retroactively revoked. She then took her case to court.

The court ruling, reached at the end of 1986, was a slap in the face for the university. It found her rustication to have been illegal and invalid.

In an unusually detailed judgment the Stuttgart administrative court found that the examination committee and university administration had made not the slightest attempt to take the plaintiff's personal study interests into account.

They totally disregarded her interests in retroactively nullifying her course grades by declaring her immatriculation to have been invalid.

A measure of such a decisive nature would not even have been warranted if there seemed to be any likelihood — a point on which the court refuses to be further drawn — of her being unable to complete the course for health reasons.

She could, when all was *said and* done, gain a partial qualification. And the court referred to the finding of surveys it commissioned that Frau Herrmann would at least seem able to make further progress in the basic course of study.

Besides, she had already taken one grade in her first semester.

Even though they and the university's administrative officers had been severely reprimanded in the court ruling the registration papers Gitta Herrmann was sent for the 1987 summer semester were accompanied by what could, at the very least, be described as a discouraging letter.

She was told that the university was not prepared to be of any assistance in arranging for oral exams and that the professors who objected to allowing her to take part in practical courses could not be obliged to do so by the court ruling.

But Hohenheim University staff are not all hardliners. "She ought to have realised she couldn't complete the course," Professor Wolfgang Haubold now says.

He adds on a quieter note that: "Personally I would have preferred her to find out for herself rather than have resorted to legal means of dealing with the problem."

Professor Hans-Jürgen Holtmeier has thought things over and changed his mind. He no longer feels a blind student could not possibly take part in and pass his practical course in dietetics.

Professor Holtmeier, a Freiburg specialist in internal medicine, has mainly changed his mind on account of laboratory conditions and facilities.

So many jobs have been axed, he says, that "Frau Herrmann would in no way be disadvantaged by not taking part in our negligible training course using antiquated equipment."

This is the conclusion he has now reached in an expertise for the court.

After she had been thrown out, Frau Herrmann took a practical course at the Frankfurt children's tumour centre, then attended US universities where blind students have already qualified.

She could study dietetics — and would love to do so — at Cornell University, New York, funds permitting.

Her disability is certainly no handicap, the US university says. She is either capable of fulfilling the course requirements or not. Period.

Cornelia Girndt

(Frankfurter Rundschau, 16 July 1987)

■ MEDICINE

Controversial fresh-cell rejuvenation treatment banned pending more tests

Fresh cell therapy has been banned by the Federal Health Office, Berlin. Four deaths in swift succession triggered the move against a treatment that has been controversial for decades.

Embryonal fresh cell therapy, also known as Niehans therapy, involves injections of cells taken from freshly slaughtered animals. Periodic injections are claimed to restore vitality and cure all manner of ills.

After detailed consideration of the benefits and risks the Berlin agency has imposed a temporary ban on the sale of fresh cell serum until June 1988, by when a final decision is to be reached on whether the decision was warranted.

A total of 235 dry cell preparations supplied by four manufacturers are affected by the ban.

Dry cells are shock-frozen fresh cells of animal origin. They are thawed before being injected and claimed to give patients fresh vitality and cure all manner of maladies.

Fresh cells in the proper sense of the term are taken from freshly-slaughtered animals or foetuses and injected immediately. The ban does not include them because they aren't, strictly speaking, medicinal drugs, from which it follows that the Federal Health Office is not responsible for them.

Health authorities in the *Länder* have intervened where fresh cells are concerned, however.

In Baden-Württemberg fresh cell therapy has been prohibited. In Hamburg a ban has been imposed on manufacturing and importing fresh cell material.

In the Rhineland-Palatinate, Bavaria and Lower Saxony Niehans therapy is permitted solely on the understanding that patients have been warned on the risks and then agreed in writing to injections being given.

The other *Länder* can be expected to follow suit. In West Berlin fresh cell therapy has been prohibited since last year.

The Federal Health Office's decision was long overdue. The four deaths were not the only recent shadow to be cast on the controversial rejuvenation technique.

In 1955 a survey at 180 clinics revealed 80 cases of complications and 30 deaths after fresh cell injectkions.

Death did not always immediately follow the injection as, for instance, a result of uncontrolled allergic responses. The patients frequently died later of complaints affecting various organs.

Despite the evident risks medical warnings about cell therapy have repeatedly been cast to the winds by a fair number of doctors.

In summer 1976, for instance, the scientific advisory council to the *Bundesärztekammer*, or General Medical Council, stated that:

"The effectiveness of cell therapy has not yet been proved on the basis of scientifically acknowledged principles. The risk of illnesses being transmitted over and above the immunological hazard cannot be ruled out for sure with fresh cell injections.

"So we warn in particularly strong terms against the use of fresh cells on account of the additional threat of infection the patient faces."

This statement may have been hoped to have some effect on enterprising doctors and clinic operators. But it failed to do so. Even now the Federal Health Office has imposed its ban they still say they intend to carry on undismayed.

These undismayed members of the medical profession are fond of quoting Paul Niehans, the Swiss surgeon (he died in 1971) who used this method to treat such distinguished public figures as Konrad Adenauer, Pope Pius XII, Marlene Dietrich, the Aga Khan and Marilyn Monroe.

Ibn Saud and Fidel Castro even had entire teams of doctors flown in — together with the sheep that were killed to extract the cells to be injected.

Professor Niehans treated a 47-year-old woman who was referred to him in an emergency in 1931. In a goitre operation parts of her parathyroid gland had been surgically removed by mistake.

The parathyroid plays a crucial role in the calcium metabolism. When it ceases to function fully or, in the case in question, is no longer there to do so, the blood calcium level plummets and violent convulsions can occur.

Unless prompt and effective treatment is given the patient may be in mortal danger.

As the patient was already suffering badly from tetanus, Professor Niehans had to act fast as she lay there shaken by spasms.

On previous occasions he had transplanted the parathyroid glands of freshly slaughtered calves to redress the balance, but the results had often been unsatisfactory.

So he mashed up a calf's parathyroid instead and injected the mash into his patient in a saline solution.

The result was such a striking success that Professor Niehans' cell therapy went on from strength to strength and was repeatedly used to treat other complaints too.

Professor Niehans exercised constant restraint in public utterances on how his method worked. He never mentioned more than "possibilities."

Not so fellow-doctors Kludes and Riesenberg, who felt the secret of its success did not lie in the living cell itself. They felt its effect was catalytic and extended to the entire organism.

It might be attributable to activation of the hypophysis and adrenal gland.

As for Professor Niehans' first patient, the effective substance in the fresh cell mash is now felt to have found its way straight into her blood, thus quickly stabilising her calcium count.

It was certainly not long before celltherapy had new supporters in substantial numbers. Cells taken from freshly slaughtered calves were soon joined by cells from cows' foetuses and from freshly killed mountain sheep, which are reputed to be particularly healthy.

Cells were subsequently deep-frozen and the water extracted, with the result that long-life "dry cell preparations" could be manufactured and marketed.

It gradually transpired that people were motivated more by belief in the magic power of fresh cells to consultcell therapists than by any rational consideration. In accordance with the homoeopathic principle formulated by Samuel Hahnemann, today's "miracle cure" medics claim that *similia similibus curantur*, or "likes are cured by likes."

They began to argue that cells taken from the hearts of unborn sheep could rejuvenate the hearts of elderly patients, while kidney cells were claimed to cure kidney complaints and testicle cells were said to stimulate virility.

Cell therapy has lately been recommended to treat such widely differing complaints as overexposure to radioactive contamination, degenerative complaints of the joints, asthma and chronic constipation.

Supporters of cell therapy were apparently unperturbed that setbacks and fatalities occurred.

In point of fact the injection of alien cells is tantamount to an organ transplant and triggers what can be violent immune responses.

In Professor Niehans' time violinist Georg Kulenkampff died of a virus infection at the age of 50 after a course of fresh cell treatment.

This case was particularly macabre when viewed in the light of a comment by Professor Niehans, who once said:

"I turn down nine out of 10 patients who consujlt me. I select for treatment those who are of value to the world."

Other fresh cell patients died after heart attacks or allergic shocks in the wake of immune responses.

As injected cells can transmit animal diseases and be to blame for virus infections such as the visna maedi virus and the scrapie germ, there is a considerable risk.

Over and above its dubious medical and scientific status cell therapy is

Frankfurter Rundschau

mainly suspected of being promoted because it is particularly lucrative.

Fees of between DM5,000 and DM10,000 are not infrequently charged per standard course of treatment.

That doesn't include the cost of clinic accommodation.

In connection with cell therapy the most adventurous claims have been made, as by Dr Fritz Wiedemann, a self-styled vital cell therapist and owner of "regeneration centres" in Ambach, Daisendorf and Gran Canaria.

Dr Wiedemann dismissed the warning statement issued by the General Medical council in 1976, saying:

"They haven't assessed the matter adequately. They have no real experience and were in no real position to judge."

On balance, the methods adopted by fresh cell therapists have much in common with those of all advocates of medical magic.

The leading role is played by gullible patients who are convinced in advance of the success and efficacy of everything that is done with them.

That presupposes a measure of respect and awe of the man in the white housecoat — and of his hefty doctor's fee.

The doctor himself plays the role of a drug, as do the atmosphere of respect, the thickly-carpeted lobbies and the bold architecture of clinics built in pleasing locations.

Theo Löbsack

(Frankfurter Rundschau, 15 August 1987)

Continued from page 10

shows splendid court art which is astonishing. There are pectorals, strings of pearls, gold rings, reliefs, busts, statutues and statuettes, ceremonial axes, weapons, faience, alabaster, cosmetic utensiles and imports from Crete, for example, evidence of the wide trade links the New Kingdom maintained.

On the one hand the life of the ruling classes is reflected. On the other the labouring population, the farmers and bricklayers, who were looked down upon, despised and regarded with abhorrence by the civil service.

The kings appear in these portrayals as ideal types, realism is exaggerated. Workers are portrayed at work, unshaved and with unkempt hair.

Beside the aesthetic marvels in the exhibition there are examples of the tools of everyday life such as mortars, blades, spatulas, moulds, brickmoulds and pickaxes.

Life and its continuation into the afterlife is the second aspect of this exhibition. The Egyptians did not regard life and death as contrary to one another but rather as a great unity. In this respect Hildesheim museum director Arne Eggebrecht has added another highlight to this exhibition which is something of a pioneer for future exhibitions of this type.

In the basement under the exhibition rooms the visitor is introduced to the burial chamber of Sennefer, mayor of Thebes, the "Grave with the vine leaves" reproduced with exact attention to detail.

It has been reproduced with the aid of special a photographic process which was tested in Hildesheim in 1982 with an exhibition of the Caves of Lascaux.

The impression of authenticity is astonishing and the intention is the same.

Lascaux and the Caves of Altamira with their Stone Age rocks have been endangered by mass tourism and have had to be closed. The same is also true of many of Egypt's antiquities.

Eggrebrecht wonders if admission should only be allowed to copies of these treasures. This is a proposal worthy of consideration, although there is a touch of Disneyland to the suggestion.

Around the burial chamber are displayed objects from the Egyptian cult of the dead, pitchers for keeping the entrails of the dead, a mask of Anubis, which the priests wore in the embalming ceremonies, grave reliefs, dummy vessels as burial objects, death statuettes and fake doorways. Special attention should be given to a splendid golden bowl and golden sandels of the time of Thotmes III.

Another rarity, even at an exhibition of this class, is many death papyri, that provide information on Egyptian ideas of the underworld.

These papyri come from the collection of the Egyptology Museum in East Berlin and are evidence of the splendid links between Hildesheim and museums in East Germany.

The papyri include a letter from Sennefer to his tenant Baki. It is likely that the addressee never got the letter, which was probably a good thing for Baki's peace of mind.

Sennefer's tone to his subordinate, reminding him of his official obligation, is tart to say the least.

"Do no be careless, for I know what is said about you, that you are idle and lie about having eaten to the full."

Ekkehard Böhm

(Hannoversche Allgemeine, 7 August 1987)

■ SPORT

An athlete-turned-yachtsman who cheated death

STUTTGARTER ZEITUNG

Tahiti. Tonga. Samoa. Fiji. The names that idyllic dreams are made of.

But for Walter and Lucia Adams, they are reality. They are ports of call in their trip round the world by sail.

Walter Adams used to be a top-class athlete, an 800-metre specialist who failed to win a medal at the 1968 Mexican Olympics by a mere half second.

Two years later in an international meeting in Stuttgart against the United States, he ran the 800 metres in 1min 44.9sec, at that time the fastest time ever by a European. It is a time that even today, 17 years later, would keep him up with the fastest.

He was one of Germany's Four Musketeers, together with fellow middle-distance runners Harald Norpoth, Bodo Tümmler and Franz-Josef Kemper.

He made the change to a non-running career without problems, which is more than can be said for many athletes. Walter Adams didn't even need the aid of the big sports equipment manufacturers.

He got himself there. He became one of the most successful photographic designers in the country and the big illustrated magazines were full of advertisements he had designed. Everything was going right for him.

Then it was discovered that he had cancer. That was at the end of 1973, and his chances of survival were considered to be slender.

He had several operations, and he had to undergo radiation treatment more than 100 times. He wasn't even 30 years of age. But Adams was made of sterner stuff. He ran the best race of his life and outran death.

The illness must have had a strong influence on his decision to sail round the world, but a more direct influence was a Christmas present given him in 1980.

It was a book in which a Frenchman, Bernard Moitessier, described how, after sailing round the world in a single-handed race, he arrived outside the English port of Plymouth and then turned round and sailed back out to sea. Walter Adams became fascinated with the idea of sailing round the world.

Dr Hans-Peter Sturm, president of Adams' local athletic club and a Stuttgart chief of police, said: "Walter Adams was always a perfectionist."

That's why Adams made his plans and stuck to them. He did a first-aid course, another on how motors work, learned some tips from a dentist about how to carry out small repairs. He bought an 8.6-ton, 10-metre yacht with a three-metre beam in Holland for 300,000 marks, took it home and worked on it for seven months and named it St Lucia, after his wife.

Then, one day, everything was ready. Adams produced his plans publicly. He had just bought a house with a sauna, whirlpool and a library in it. He held a house-warming party and dramatically announced that the house had been sold again.

"We won't be here in another year," he said. Walter Adams had prepared everything perfectly. Josef Schmidt, another Olympic 800-metre runner from Adams' home town of Kornwestheim, near Stuttgart, and now an investment adviser at a bank, invested Adams money over 10 years so that he would get a monthly return of 1,000 marks.

After a year's preparation on dry land, the Adamses spent two years on the Mediteranean. They sailed to Greece, Spain and then out to Gran Canaria in the Atlantic.

At the beginning of December 1985, they set out from Los Cristianos in Teneriffe. The first destination was Martinique, 2,700 nautical miles to the south west.

On Christmas Eve, they put up a plastic Christmas Tree and opened a bottle of Trollinger wine and ate a Schwabian pasta-and-meat dish called Maultaschen. And potato salad. It took 19 and a half days for the Atlantic crossing. On board with them were three cats.

Adams wrote in a letter: "Columbus must have been green with envy." The letters were the most important contact with home.

He wrote to Anita Gamm in Kornwestheim. She photocopied them and distributed them to friends — another example of organisation.

They reached Martinique and in Guadeloupe, their diet changed. Maultaschen were not exactly stocked in every corner shop.

But there were bananas — 100 of them for five marks. In Dominica, 30 grapefruit cost three marks. And mangos lay on the streets.

Fish cost nothing. In Venezuela, they waited for a hurricane to blow itself out before going through the Panama Canal and out into the Pacific.

Now, a friend from Kornwestheim, Thomas Dannecker, came along for four weeks. He had been sent a shopping list by the Adamses and had flown to Tahiti with the requested items and joined the vessel for four weeks on the way through French Polynesia.

Dannecker reported later: "They both feel excellent." The most notable event so far had been a week-long visit with the local people on an island off the coast of Venezuela.

Now they were looking for somewhere where they could sit it out during some expected hurricanes.

Probably in the Fiji islands but possibly also in New Zealand.

The question remained open if the couple would return to Germany. Dannecker said: "Nothing more precise can be said. Perhaps they will be here again in two years."

Hans-Peter Sturm, on the other hand, considered that the Adams couple would not return to "the bourgeois life".

Yet perhaps the couple will, just before the end of their world trip, turn around. Just like Bernard Moitessier did.

Roland Eitel

(Stuttgarter Zeitung, 10 August 1987)



Mangos on the high seas . . . Walter and Lucia Adams. (Photo: Private)



Life's too short to get angry... Berend Beilken. (Photo: Nils Bahnsen)

Veteran skipper sees sailing as a metaphor for life itself

West Germany finished fifth in this year's Admiral Cup yachting competition, the unofficial world championship of the high seas sailed off the south coast of England and the Irish Sea. The skipper of Diva, one of the team of three German yachts was Berend Beilken, who has been competing in international events for many years. In this article for the Hamburg weekly, *Die Zeit*, Uwe Prieser talks to one of the country's most experienced yachties.

If it is true that anyone can be born to be something, Berend Beilken was born to be a sailor. Anyone who grows up close to the sea never gets the smell of it out of his nostrils.

Berend Beilken comes from Vegesack, near Bremen, on the flat coastland of north Germany. And it was there that the childhood smell of the salt water, the feel and sound of the wind, the scudding of the clouds became a part of his psyche.

If the wind and the clouds are simply there, taken-for-granted accessories to the vagaries of the sea itself, they take on a new, hard significance when a boy becomes a yachtsman and starts to learn to read the signs and develop a feel for a craft and its environment.

And so it was for the young Beilken. In his more serene moments, his blood circulates in time with the currents: then he has everything, the skies, the earth and the wind and the water. He is a part of the integral whole.

He has sailed the Pacific and Indian oceans, through the seas around Bermuda where the notorious triangle is said to claim its victims. And he has cruised up and down the North Sea.

He has just finished taking part in a familiar event, the Admiral's Cup, as the skipper of Diva, one of three German ocean-going yachts taking part off the south coast of England and the Irish Sea.

German yachts have won this world championship of the high seas three times. Three times Beilken has been involved, in 1973 and 1985 as a skipper and in 1983 as trainer and coordinator.

He sailed in his first regatta at the age of five on Vegesack harbour. At 17 he sailed on Germania, a yacht belonging to the Krupp family, in a race from Buenos Aires to Rio de Janeiro.

The Krupps were customers of Beilken senior who had a sail-making works that he had inherited from grandfather Beilken. Berend followed the tradition. "When my parents asked me what I wanted to do, I had to say sailmaker."

He and his elder brother, Hans, took over the business. Berend later decided not to make sails any more and left the firm to branch out on his own.

Beilken Brothers sails are known wherever yachts are sailed. The business kept on growing, and as it grew it left less and less time for sailing. Berend decided one day that he wanted to sail, not work seven days a week.

In 1968, Hans and Berend Beilken became the first Germans to win the world one-ton championship — their win, off the New Zealand coast, was in a yacht called Optimist.

Berend says a sailor needs to be resourceful because so much can happen: the mast or rudder can break, or the vessel can spring a leak.

You can almost extrapolate an entire philosophy from his sailing attitudes. Life as an exercise in improvisation in relating to the laws of nature on top of a surface which carries man along but which also can destroy him.

Man can at times almost fly, but he can also drown. "No one can actually conquer the sea. You have to understand it and unite with it," says Berend.

He became self-employed seven

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■ HORIZONS

Just imagine a cloud, a big radioactive one . . .

DIE ZEIT

The Bavarian city of Schweinfurt has been destroyed three times in its 1,200 years.

The first time was in the 13th century when an avaricious noble family defeated the Bishop of Würzburg at the settlement on the River Main.

Three hundred years later, during the Confessional War, it was burned down. Then during the Second World War it was reduced to rubble.

But the citizens of Schweinfurt always rebuilt their city and every time, so writes Mayor Kurt Petzold, "from the inheritance of the past a new, a more beautiful city originated."

After the next destruction of Schweinfurt, as described by authoress Gudrun Pausewang, who specialises in books for children, the Bavarian city will remain as beautiful as it is now, but it will no longer be inhabited.

In her latest book, *Die Wolke* (The Cloud), everyone is included in the Red Cross's list of the dead. The Cloud is radioactive and comes from the Grafenrheinfeld nuclear power station, where a terrible mistake has been made.

Those of the city's 50,000 people who have not died are cordoned off in the city of the dead. The rest of the country is in chaos.

Just after the book was published the *Schweinfurter Tagblatt* wrote in February this year: "This is obligatory reading for all citizens of Schweinfurt. We can no longer say that we did not know."

The reviewer was Werner Bonengel, the city's security officer responsible for the safety of the city's population if "The Cloud" really should come.

Pausewang's scenario of a dreadful mass exodus must strike a strict security office as heresy.

But Bonengel is himself a heretic. He does not believe that his plan to deal with a catastrophe would work if a cloud were released from Grafenrheinfeld.

The state has assured the citizens of Schweinfurt that nothing like that could happen. Central government has recommended in its contingency planning that should a catastrophe occur, an area within a radius of ten kilometres should be evacuated.

But the state of Bavaria has reduced this to five kilometres.

Bonengel said: "That left us in the clear." The handfull of Schweinfurt citizens, who lived in what was left of the danger zone by the stroke of a pen by the Munich authorities, would have to be able get out of the area on foot — for example to the pub three streets away.

No-one in the Town Hall believes that a catastrophe would be contained within the limits set by government officials using a pair of compasses and a ruler. So the civic authorities themselves are making preparations to evacuate the whole city.

Central government's city planners pretend that they would have 24 hours from the moment the alarm was given until the security measures on the reactor had been breached.

They have organised the city into evacuation districts, assigned roads for casualties and reception areas. They have distributed information, including maps, dealing with their plans by house-to-house circulars.

Officals in the Town Hall have calculated that it would take 17 hours to evacuate the city including its 30,000 commuters.

This could only happen if citizens have faith in the administration and follow instructions. Officials believe that the prerequisites for this were knocked on the head at the latest in the spring of 1986.

Bonengel said: "After the confused information about Chernobyl citizens no longer automatically believe officials."

He no longer believes that there would be an orderly evacuation in 17 hours but "a wild, chaotic flight."

This would happen no matter how emphatically broadcasts stated that there was no acute danger and that the evacuation was only precautionary.

Bonengel said that "people's subjective reactions had been neglected." As a result of this verdict Town Hall officials have been looking for a solution that "takes into consideration people's likely chaotic behaviour and that works," said Bonengel.

The main problem is that roads must be kept free from fleeing people so that buses and aid vehicles can get into the city. But who would observe road restictions under such conditions?

Mayor Petzold said that others would quickly follow the first person to disregard street barriers. "That would upset everything."

To channel the chaos the Mayor is now considering massive barriers that would be permanently placed at selected points and that could be lowered across roads at the press of a button.

Instead of the simple notice "No entry" weapons would be deployed. "Although it sounds tough beside each of these barriers the state must post two policemen armed with machine guns."

The disturbing demands in Schweinfurt are regarded with displeasure in the Bavarian capital, Munich. But since Gauweiler has taken over at Bavaria's Interior Ministry the demands made in Schweinfurt no longer fall on deaf ears.

A regional commission has been set up to propose "realistic" plans should a nuclear catastrophe take place in Lower Franconia. The commission has also been asked to deal with the question how non-motorised people would be fetched out of the threatened city.

At least 600 bus trips would be necessary. The telephone numbers of bus operators are included in the castastrophe plan.

Mayor Petzold knows, however, that "People would also listen to the radio and know what was happening in Schweinfurt. No-one would willingly travel into the city under those conditions."

Legal compulsions urging people to do their duty would be of little avail.

Petzold is demanding that "transport really be made available." The state must station buses in the city and commandeer riot police or Frontier Police officers to drive them.

That would be expensive but, Petzold said: "If a nuclear power station costs four billion marks there should be no argument about spending a few millions on protection in time of catastrophe."

If nuclear power station operators come to Schweinfurt they must bear the cost.

Bonengel said that if the state just wanted to this could be applied as a condition of approval according to nuclear power legislation.

Gudrun Pausewang's report of the panic after a reactor melt-down in Grafenrheinfeld has for months on end been selling well, according to the local book-trade.

Hundreds, perhaps thousands have been sold to members of the citizens' initiative movement.

Has much attention been paid to it in Schweinfurt?

Mayor Petzold is of the opinion that if passages were read to any citizen of Schweinfurt, who normally never reads a book, describing the nuclear scenario of death and flight, unconcern and suffering, the expected reaction would be: "Yes, of course, it certainly has had some effect."

Petzold has been of this opinion for a long time. Up to the final judgment the city complained, but without success, about the nuclear power station on the city's doorstep.

Then, despite the protestations of the state government, the city devised its own measures for dealing with a catastrophe, realising that the plans that had been drawn up until then were naive.

The Mayor said: "Don't ask me what I shall do if our efforts are again unsuccessful."

He added thoughtfully: "It will be difficult then for some with their credibility and their conscience."

Helmut Badekow

(Die Zeit, Hamburg, 31 July 1987)

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years ago. His firm's premises are sober and functional. There is a drawing board and a video set for film demonstrations.

Over Berend's head is a model of a transparent roof section made of a synthetic material used to makes roofs for covered walkways or pedestrianised streets.

He is meticulously dressed with, significantly as I was to learn, a blue shirt. I got the feeling that he might at any time spring to his feet and do something unexpected. There was also the feeling that he was about to start laughing, but it was a feeling that deceived.

Beilken, 47, wears his fair hair over his ears. There is just a suggestion of grey round the temples. He talks about sailing. That means he talks about himself. "At the age of 20, I built myself a Finn-class dinghy. I took it to the Kiel (sailing) Week and at my first go, came sixth. It blew a gale, but my experience of sailing on the high seas stood me in good stead. I was good in heavy weather. I have always managed to get my tub back into port."

When he realised that his weight of 65 kilos (10 stone 3 pounds) was too light for him to push his way into world class, he changed yacht. "In the middle of Kiel Week, I pushed the yacht up the beach and never used it again."

Beilken has won world, European and German championships in a variety of yachts. Only an Olympic medal has eluded him.

He was in line to sail for Germany in the Flying Dutchman class at the 1968 Mexico Olympics. In 1967, he won at Kiel again but lost a sail-off for the Olympics against Ulli Libor, of Hamburg. Libor went on to win the silver medal.

"When today I think about my preparation then, I wonder how I managed to get as far as I did. Then it was just a matter of building a yacht, making a sail, mast up, sail up, and go. I just stepped out from the sail workshop straight into the yacht."

Four years later, he took part in a tempest in another sail off for the Olympics in Munich and came second although he was top rated. "That annoyed me intensely. After that I didn't even want to be merely the standby crew.

"If I had prepared then as well as I did for the Admiral's Cup, then I would have made it to the Olympics. Certainly to Mexico. Easily."

He used to work seven days a week. "I used to go down to the harbour on Fridays and deliver sails and help with advice and service. But there just wasn't enough time for training. And suddenly I had had enough of that life. I wanted to be a yachtsman and not a sailmaker."

If he were to wake up one morning and find the sea was coloured red instead of blue, it would be a blow for him. "Our yacht is blue, I always drive a blue car, and my wife says that blue suits my eyes best. Only my eyes aren't blue. They're brown."

His secret is to sail where the wind is; to manoeuvre the yacht so that it sits optimally in relation to the wind and cuts through the waves with the minimum resistance.

Learning to see which way the wind is turning by the behaviour of the cloud edges and getting to know the flow characteristics of any piece of water, is, he says, something that anybody can do.

What is important is developing a certain feel. The wind blows with a particular rhythm. You have to discover that rhythm. A good yachtsman can sail with his eyes closed.

"Harmony is the thing," he says. "Everything must be harmonious. And that includes the crew. Naturally as skipper, I have a certain power, but the power doesn't interest me at all. It's more the recognition. And if something goes wrong, I don't get too worked up. Life is too short and beautiful for that."

Harmony is also a collective experience. "When I think about that last Fastnet race (in the Admiral's Cup). Eighty hours at sea, soaked through, never less than force eight winds (gale force of between 34 and 40 knots with foam on the wave tops). And then getting back, off to the digs, taking a shower and then simply crashing and sleeping. Total enjoyment."

The telephone rings and he has to make a complicated technical explanation to a customer. "Here in the firm we are also a complete team," he says as he replaces the receiver.

He says how he admires the mountaineer Reinhold Messner. "He is complete. But I couldn't be like him. I am not possessed enough. I also need some light-heartedness, some cheerfulness around me."

He rides horses, military and hunt, and says he prefers to ride in the front group in the full knowledge that if he fell at a hurdle, he would be at the mercy of the 70 horses behind him. He could die.

"Then I ask myself sometimes if it is worth it, going out riding with a lot of others, and then I think, well, it's one of the few freedoms still left, and then I say to myself that I couldn't care less. It's worth it, all right."

But that isn't the basis to run a firm. That is something else. Better to think of the Buddenbrooks principle: to conduct business during the day in such a way that you can sleep at night with an easy mind.

Because Berend Beilken has learnt: "It is easy to sail extremely fast — in the wrong direction."

Uwe Prieser

(Die Zeit, Hamburg, 7 August 1987)